

RAISING VOICES, BROADENING INTERESTS: A LONGITUDINAL
EXAMINATION OF GENDER AND DIVERSITY IN CANADIAN FOREST
SECTOR PUBLIC ADVISORY COMMITTEES

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ABSTRACT

For decades, forest companies have used public advisory committees as a primary strategy for demonstrating public involvement in forestry. A national survey of committees was conducted in 2016 to determine whether gender biases and challenges revealed in a 2004 survey had been addressed. In the 2016 survey, members from 79 Canadian forest-sector advisory committees responded to our questionnaire, followed up by 28 semi-structured phone interviews. The data collected were used to assess how women and men participants described accessibility, values, experiences and satisfaction. In 2016, women made up 20 percent of the membership of advisory committees. Men and women participants held different values about the forest management and women were less satisfied than men with the aspects of representation, quality of discussion, decision-making procedures, the quality and diversity of information provided, level of trust among committee members, opportunities to learn new things, and the overall process. These results were similar to those found in 2004, suggesting that committees have not made significant changes to their structures or processes to address gender imbalance or to make the committee processes more welcoming to different perspectives. Committee members identified a need for greater Indigenous involvement; this ambition may be difficult to achieve if their processes are not welcoming to different ways of knowing or doing.

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LIST OF ABBREVIATIONS

AAC	Annual Allowable Cut
CCFM	Canadian Council of Forest Ministers
CSA	Canadian Standards Association
FAC	Forest-sector advisory committee
FPC	Forest Product Companies
FSC	Forest Stewardship Council Canada
GDP	Gross Domestic Product
NFD	National Forestry Database
NRC	Natural Resources Canada
SFM	Sustainable Forest Management

CHAPTER 1

INTRODUCTION

Canada has 347 million hectares (ha) of forest land of fundamental importance to the Canadian people and to maintaining biodiversity (Natural Resources Canada [NRC], 2016). Approximately 94 percent of these forests are publically owned and governed by provincial, territorial, and federal governments. According to Section 92 of The Constitution Act, 1867, each province in Canada can enact legislation related to its forest resources. However, forest practices in all jurisdictions need to follow federal laws and international treaties signed by the government (NRC, 2016).

According to Carrow (1999), “Historically, all the direction and priorities in forest management on Crown land were determined through negotiation and discussion between the provincial government and the forest industry. This process prevailed, largely undisturbed, until the 1960s when the first wave of environmentalism was born” (p. 73). The environmental movement of the 1960s and 1970s raised public awareness about the significance of ecosystem processes and the detrimental impact of some forest industry practices on these processes (Beckley et al., 2006). Additionally, this movement marked a shift in forest values and a consequent call for establishing more substantial mechanisms and prospects for public involvement in forest planning and policy formulation.

Over the past 40 or 50 years, however, different public engagement approaches to resource and environmental management have emerged in Canada. Participatory methods have been adopted by government agencies and private companies in Canada, including public comments, public meetings and hearings, open houses, surveys, multi-stakeholder advisory committees, co-management, and social entrepreneurship (Diduck et al., 2015). These participatory approaches have their strengths and drawbacks with respect to the scope of inclusion (broad or narrow), representation (all citizens or defined), type of engagement (information-sharing or deliberation), level of citizen power (low, moderate, or high), and role of government (active or passive) (Diduck et al., 2015).

Participatory practices in forestry have generally been informed by research in environmental management. Participatory approaches are still emerging and in the forest sector they have evolved to the point where public consultations are necessary for any major forest

policy development or forest management planning (Blouinn, 1998; Beckley et al., 2006; Diduck et al., 2015). The federal and provincial governments have put forward different management practices mandated through regulations to address sustainability and benefits to the public. In 2003, the Canadian Council of Forest Ministers (CCFM) developed a criteria and indicators' framework for Sustainable Forest Management (SFM) consisting of six criteria and 46 indicators. The six criteria include biological diversity, ecosystem condition and productivity, soil and water, role in global and ecological cycles, economic and social benefits, and society's responsibility. The social dimension of sustainability can be assessed using the criterion 'society's responsibility,' defined as 'forest practices that reflect social values' and 'fair and effective resource management choices' (CCFM, 2005, p. 8). Indicators that define this criterion include recognition of Aboriginal and treaty rights; Aboriginal traditional land use and forest-based ecological knowledge; forest community well-being and resilience; fair and effective decision making; and informed decision making.¹ The indicator 'fair and effective decision-making,' is measured, in part, by "the proportion of participants who are satisfied with public involvement processes in forest management in Canada" (CCFM, 2005, p.130). This research will consider these social dimensions of SFM.

SFM in Canadian forests is assessed through third-party forest management certification systems. The three certification systems used in Canada are the Canadian Standards Association (CSA), the Forest Stewardship Council Canada (FSC), and the Sustainable Forestry Initiative (SFI). These national market-based certification systems, such as CSA and FSC, require public engagement in forest management planning and monitoring as a condition for certification (Parkins et al., 2006). Within these requirements for public participation in forest management, the forest-sector advisory committee (FAC) has become one of the most used mechanisms for engaging local people in forest management processes.

FACs are formed as a tool for community-based public involvement, where local people can become engaged in dialogue about forest management and provide input into local decision-

¹ "Indigenous peoples' is a collective name for the original peoples of North America and their descendants. The name 'Aboriginal peoples' has also been used by governments. The Canadian Constitution recognizes three groups of Aboriginal peoples: Indians (more commonly referred to as First Nations), Inuit, and Métis. These are three distinct peoples with unique histories, languages, cultural practices, and spiritual beliefs" (Indigenous and Northern Affairs Canada 2017). However, I will adopt the term 'Indigenous' throughout the thesis.

making (Parkins et al., 2006; Reed & Varghese, 2007). Here, local people include, but are not limited to, local forest users, people involved in the forest sector for their livelihood, representatives of other local agencies such as educational establishments, the business community, sometimes representatives of Indigenous communities' organizations and elected leaders. FACs are intended to serve as an important platform to learn about multiple values and approaches to SFM. FACs offer opportunities for both men and women to bring their different perspectives and experiences to the table, and, thereby, aid in achieving SFM (Parkins et al., 2006; McGurk et al., 2006; Reed & Varghese, 2007; Richardson, 2009). Notwithstanding these opportunities, there remain questions about whether these committees engage women effectively during the discussions and decision-making process.

Gender refers to differences between males and females that are socially and culturally influenced. While our biological sex is usually established at birth, feminists contend that we become masculine or feminine through a combination of biologically determined sex differences (chromosomes, anatomical structures, hormone levels) and socially influenced characteristics (Mosse, 1993; Nesmith & Wright, 1995).

Several studies have been conducted to understand the relationship between gender and environmental management (Agarwal, 2001; Reed & Varghese, 2007; Arora-Jonsson, 2014); however, gender-based analyses of environmental management have largely been overlooked in countries of the global North, such as Canada (Arora-Jonsson, 2009; Staples, 2014). This has been attributed, to some degree, to the public expectation that gender equality has been attained or that gender inequality is not significant (Arora-Jonsson, 2008; Varghese & Reed, 2012). As a result, researchers often presume that resource management is unbiased, and, accordingly, they disregard the ways in which gender impacts processes and outcomes (Arora-Jonsson, 2008).

Goals associated with ensuring gender-equal representation and effective participation in decision making require studying the relationship between gender and natural resource management (Reed & Varghese, 2007). Hence, understanding the relationship between gender and natural resource management can help improve gender representation and effective participation in decision making. Previous studies have shown that women and men possess different values associated with the management of natural resources (e.g., Davidson & Freudenburg, 1996; Reed & Varghese, 2007). A national survey conducted by a research team led by Dr. John Parkins of the University of Alberta in 2004 revealed that FACs in Canada have

traditionally been male-dominated and this dominance affects the type and direction of committee deliberations and learning outcomes (Parkins et al., 2006). A new national survey of FACs was conducted in 2016 to determine whether there have been changes in FAC membership structure and deliberative processes over the past 12 years. This offers an opportunity to determine if there have been any changes in committee structure or processes that would provide for greater diversity in membership or values represented in these committees since 2004.

1.1 Purpose and Objectives

The purpose of this study is to evaluate the extent to which public participation processes for SFM in Canada retain gendered norms and expectations of the participants. This research explores the relative access to, and effective participation of, women and men in FACs. Specifically, this study undertakes a gender-based analysis of a national survey of FACs to evaluate how participating women and men describe accessibility, values, experiences, and satisfaction in connection to their membership and role on the committee. This analysis then compares results from the national survey conducted in 2016 with results from the survey conducted in 2004. Three key questions shape the research:

1. Has representation of gender, perspectives, and values on forest-sector FACs diversified since 2004?
2. To what extent do FACs offer men and women opportunities for nominal versus effective participation?
3. According to participants, are FACs effective in achieving fair, effective, and informed decisions in support of SFM?

Through quantitative and qualitative analysis of 2016 national survey data and comparing these data with a 2004 national survey, I aim to meet the following objectives:

1. Compare women's and men's past and current experiences in participating in forest-sector public advisory committees;
2. Compare changes in representation, perspectives and values represented, satisfaction and influence for men and women participating in public advisory committees since 2004;
3. Explore the nominal and effective participation of women and men in public advisory committees; and
4. Determine incentives and obstacles for creating diverse and effective FACs.

1.2 Community Dependency on Forestry in Canada

Canada contains 9% of the world's forests, comprising 47 billion m³ of wood volume (NRC, 2016). More information about forestry in Canada is provided in an Appendix A. Forests offer various benefits (economic, environmental, and social) to both Canadian people and the communities living in or near to forested areas (33% of Canadians and 70% of Indigenous people) (NRC, 2017). About 105 communities residing in mainly six provinces were considered economically dependent on the forest sector in 2016 (Statistics Canada, 2018) (see Table 1-1). In 2016, the forest industry provided 211,075 direct jobs to foresters and other technical professionals, and about 95,000 indirect jobs in related activities. The forest sector employs more the Indigenous people than any other industry, and, in 2016, forestry provided about 9,700 jobs in Indigenous communities of Canada (NRC, 2017). Overall, the higher proportion of forestry jobs were in Quebec, British Columbia, Ontario, Alberta, and New Brunswick, respectively, with a smaller proportion in other parts of the country (Statistics Canada, 2018). Likewise, forests provide several ecosystem services, including help in balancing the global carbon cycle and minimizing the impact of climate change. In addition to economic and environmental benefits, forests have aesthetic and cultural values, which are appreciated by all Canadians (NRC, 2017). The high proportion of forestland on public lands, as well as the importance of forest resources to the Canadian communities, economy, and environment, illustrate the demand for effective public participation in sustainable forest management.

1.3 Organization

The overall structure of the study takes the form of seven chapters, including this introductory chapter. This chapter provides the background, purpose, and objectives of this study. Chapter two contains a review of relevant literature and identifies the research gap. Chapter three focuses on the methodology used for this study. Chapter four compares the results of the national surveys conducted in 2004 and 2016 and analyzes the findings. Chapter Five presents the results of interviews conducted in 2016 with members of FACs in British Columbia, Alberta, Ontario, and New Brunswick. Chapter six discusses the gender-differences observed in relation to representation, values represented, level of satisfaction, and overall experience of men and women participating on the committees based on the results of the 2004 and 2016 surveys and 2016 interviews. The final chapter presents a summary of the findings and recommendations mainly based on the 2016 survey and interview findings.

Table 1-1. Forest sector-based communities by province, 2001 and 2016

	2001			2016		
	Census subdivisions	Population (Number)	Population (%)	Census subdivisions	Population (Number)	Population (%)
Total	463	863,007		105	159,420	
Newfoundland and Labrador	16	9,421	1.1	0	...	...
Prince Edward Island	0	...	...	0	...	...
Nova Scotia	4	23,300	2.7	0	...	...
New Brunswick	53	61,563	7.1	12	13,203	8.3
Quebec	195	252,583	29.3	40	45,096	28.3
Ontario	50	119,333	13.8	7	9,880	6.2
Manitoba	8	13,445	1.6	0	...	...
Saskatchewan	8	10,612	1.2	4	5,399	3.4
Alberta	8	31,115	3.6	1	1,320	1
British Columbia	121	341,635	39.6	41	84,522	53

...- not applicable

(Source: Statistics Canada, 2018)

CHAPTER 2

LITERATURE REVIEW

2.1 Overview

The literature review for my thesis begins by explaining public participation in decision making for environmental management in general terms and explores the literature related to public participation in forest management more specifically, before looking at the history and role of FACs in a Canadian context. It then reviews the existing literature on gender and natural resource management. The review concludes with a synthesis of what we currently know about the gender representation of these public advisory committees based on research from 2004. This section of the review helps identify the research and knowledge gaps that this study tries to address. Research about public participation/citizen engagement now is typically framed in the literature around ‘adaptive co-management,’ ‘social learning,’ and so on; however, I will focus this review on FACs only, looking through gendered lenses.

2.2 Public Participation in Environmental Decision Making

This section of the literature review begins by defining public participation and explaining why it is necessary in policy making. Then I explain different participatory approaches adopted in resource and environmental management in Canada. Finally, criteria for evaluating public participation processes are described.

2.2.1 What is Public Participation and Why is it Necessary?

The term ‘public participation’ has been often interchangeably used with ‘citizen participation,’ ‘civic participation,’ and ‘community participation’ (Matebesi, 2017). Various definitions of the term ‘public participation’ have been suggested in the literature. ‘Public participation’ is a commonly-used term in environmental governance, yet it is a concept difficult to define precisely, mainly because of its broad scope and purpose (Rowe & Frewer, 2004). Rowe and Frewer (2004) defines public participation as “the practice of consulting and involving members of the public in the agenda setting, decision-making and policy forming of organizations or institutions responsible for policy development” (p. 512). Another definition proposed by Beierle and Cayford (2002) is “any of several ‘mechanisms’ intentionally instituted

to involve the lay public or their representatives in administrative decision-making” (p.

6). Likewise, the International Association for Public Participation describes public participation as “any process that involves the public in problem solving or decision-making and that uses public input to make better decisions” (IAP2 Code of Ethics). Although differences of opinion exist, there appears to be an agreement that ‘public participation’ refers to engaging citizens in decisions that affect them.

2.2.1.1 Deliberative democracy

The need for engaging the public in decision-making has been acknowledged by ‘deliberative democratic theory.’ Egan (2007) has defined deliberative democracy as “a school of thought in political theory that claims that political decisions should be the product of fair and reasonable discussion and debate among citizens” (Egan, 2007). The word ‘deliberative democracy’ was first used by Joseph Bessette (1980) and was later advocated by Bernard Manin (1987) and Joshua Cohen (1989). Philosophers John Rawls and Jurgen Habermas were the early influencers of deliberative democratic theory. They promoted the ‘deliberative turn’ and have claimed themselves to be deliberative democrats in the work they have published (Dryzek, 2000)

According to Fearon (1998), deliberation “refers either to a particular sort of discussion - one that involves the careful and serious weighing of reasons for and against some proposition— or to an interior process by which an individual weighs reasons for and against courses of action.” (p. 63). Deliberation is now considered as the critical element of democracy (Dryzek, 2000). Dryzek (2000) further explains that “the deliberative turn represents a renewed concern with the authenticity of democracy: the degree to which democratic control is substantive rather than symbolic, and engaged by competent citizens” (p. 1).

Several definitions of deliberative democracy have been put forward; nonetheless, Elster (1998) suggests the definitions all agree that the concept includes “collective decision making with the participation of all who will be affected by the decision or their representatives” and also “decision making by means of arguments offered by and to participants who are committed to the values of rationality and impartiality” (p. 8). According to Abelson et al. (2003), “Collective ‘problem-solving’ discussion is viewed as the critical element of deliberation, to allow individuals with different backgrounds, interests and values to listen, understand, potentially persuade and ultimately come to more reasoned, informed and public-spirited decisions” (p. 241).

Another rationale for public participation is based on a rather different opinion that “when it comes to implementation of policy, decisions which have been reached with maximum public involvement are most likely to have minimum opposition, thus reducing friction, easing implementation and perhaps avoiding expensive reversal of decisions” (B.C. Provincial Task Force on Citizen Participation: as cited in Franson & Burns, 1974, p.1). This view is reflected in many regulations that call for the public involvement in policy making, and it also indicates a motivation for legitimizing decisions made (for social acceptability).

Additionally, environmental problems are often associated with complexity and uncertainty. The potential impact of environmental problems is not restricted to a specific area or community; instead they have multiple impacts at different levels. These complexities of environmental problems require that environmental decision-making processes be transparent, considering the views and values of a wider public or relevant stakeholders (Stringer et al., 2007; Reed, 2008).

However, despite a huge demand for public participation, some authors have argued against public involvement in complex policy making (Slovic, Fischhoff & Lichtenstein, 1982; Brooks & Johnson, 1991; Earle & Cvetkovich, 1995). These researchers cite lay people’s lack of knowledge and analytical ability as reasons against participation. According to Brooks and Johnson (1991), human inadequacies limit the public’s capacity to contribute in complex policy decisions. This argument is supported by a model used in science communication studies known as the ‘information deficit model, which claims that the doubt and skepticism of modern science and technology can be due to a lack of knowledge about the said science or technology (Sturgis & Allum, 2004). The general public might not have sufficient knowledge to understand complex problems and to acknowledge science as an incremental process; these deficiencies limit the level to which the public should be involved in a complex policy making process (Brooks and Johnson 1991). Similarly, Rowe and Frewer (2000) suggest “It is likely that more knowledge-based decisions will require lower levels of public involvement than more value based decisions” (p. 6). The public may sometimes consider some risks as crises, either due to their lack of knowledge or personal perception; Moffet (1996) warns that while promoting public involvement for policy making, practitioners or administrators must be cautious that priorities are not driven by “the crisis of the day” (p. 379).

Given different viewpoints, this thesis is based on the premise that public involvement is useful in environmental management to improve environmental quality and community capacity, as well as to reach quality decisions. Governments have opened up avenues for public involvement in environmental management. The following section provides different participatory approaches in environmental management being adopted in Canada.

2.2.2 Participatory Approaches in Environmental Management

The demand for meaningful and informed public engagement began in Canada in the 1960s, a period that marked a rise of concern for environmental issues in Canada (Macdonald, 1991; Parkins 2006). Demand for greater public participation also arose to decreased faith in policy formulating processes and declined trust in politicians and experts (Rowe & Frewer, 2004). Hence, provincial and federal governments began to support new public engagement processes (Parkins, 2006).

Several methods of public participation for environmental management have emerged over the last 40 years in Canada. Some of the more formalized methods for public participation include public meetings and hearings, open houses, surveys, multi-stakeholder advisory committees, co-management, and social entrepreneurship (Diduck et al., 2015). Table 2-1 summarizes some of the participatory methods used in Canada. Diduck et al. (2015) assessed three different models: multi-stakeholder advisory committees, co-management and adaptive management, and social entrepreneurship. The authors concluded that certain methods were better than others to accomplish certain goals. Nonetheless, design features and informed judgement were essential to ascertain a suitable method of public participation in each context (Diduck et al., 2015).

Arnstein (1969) presented the earliest classification of the participation commonly referred to as Arnstein's ladder of citizen participation. She developed a typology of citizen participation, which distinguishes between eight different degrees of participation and influence (see Figure 2-1). The bottom five rungs represent the most commonly-used tools of public participation, where minimal decision-making power is bestowed on the public (Propst & Bentley, 2000), and the top three rungs posit meaningful participation opportunities, where members of the public have an influence on decision-making.

Table 2-1. Methods for public participation in Canada

Methods	Use in Canada	Design Features				
		Scope of Inclusion	Representation	Type of Engagement	Level of Citizen Power	Role of Government
Public comments	Used extensively during environmental Assessments	Broad	No defined representation. All citizens may participate	Information-sharing	Low	Active
Surveys	Surveys are used in Canada to gauge public opinions on particular issues (e.g., a national telephone opinion survey to determine public support for a carbon tax among Canadians in 2012)	Broad	Participants are usually selected either by stakeholder's interest or socio-demographic factors	Information sharing	Low	Active
Public meetings and hearings	Used extensively in regulatory proceedings and environmental assessments (e.g., review panels under the Canadian Environmental Assessment Act, 2012)	Broad	No defined representation. Usually specific communities are targeted	Information sharing (and testing)	Low	Active
Advisory committees not seeking consensus	Advisory committees are fairly common in Canada	Narrow	Depends on context, i.e. could be based on stakeholder interest, expertise, etc.	Varies according to context	Depends on context, e.g., authority may be given to committee based on government direction	Depends on context, i.e., government may play a more active role for larger-scale, politically important issues
Advisory committees seeking consensus	Advisory committees seeking consensus are also common in Canada	Narrow	Representation comes from various stakeholders or interest groups	Deliberation	Moderate to high	Same as above

Source: Diduck et al. (2015)

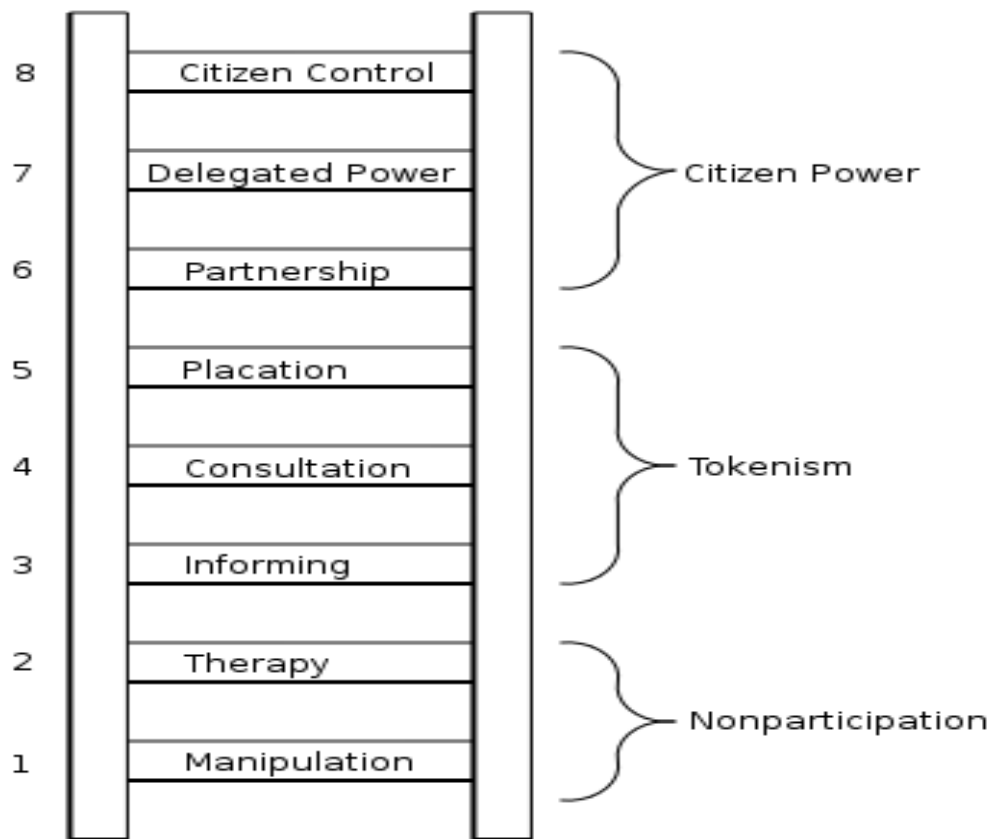


Figure 2-1. A ladder of citizen participation (Arnstein, 1969)

Initially Arnstein's ladder of citizen participation was developed for urban planning processes; however, the concept continues to be widely applied by scholars of environmental and resource management (Reed 2008, Diduck et al., 2015). Moreover, even after around half a decade of her work 'A Ladder of Citizen Participation' there is still debate among practitioners over how to effectively engage citizens in a participatory process. The issue of power distribution among citizens and agencies is the most debated item (Slocum et al., 1995). The literature shows that much of the research in environmental management does not set out 'citizen control' as the ideal; rather, researchers tend to focus around building partnerships as an ideal against which contemporary practices are assessed.

2.2.3 Criteria for Evaluating Public Participation

Public participation is typically evaluated by its ability to support and facilitate the engagement of different groups of stakeholders. In 2003, Conley and Moote suggested that different stakeholders have different expectations: general participants want their personal goals met from participation; facilitators and proponents want guidelines to identify approaches appropriate in different circumstances; and policymakers want these discussions to help recommend policies to formulate rules and regulations. The evaluation typically varies with the expectation, the individual doing the evaluation, and the context of the public participation (Conley & Moote 2003). Regarding the context of the public participation, Reed et al. (2013) suggested that the geographic, social, administrative, and governance context have a considerable impact on the suitability of participation goals and strategies, evaluation criteria to be applied, and outcomes realized.

Process-oriented evaluations and outcome-oriented evaluations are the two common methods used to examine the effectiveness of public participation (Conley & Moote, 2003). The outcome-oriented evaluation compares actual program outcomes with desired outcomes, and the process evaluations, involving in-depth interviews or observations with participants, focus on their satisfaction. For the purpose of this thesis, process-oriented evaluation criteria have been considered. In the literature, I found various criteria proposed for process-oriented evaluations of participation. The process criteria considered for this research are mainly drawn from the work of Reed (2008); Saarikoski et al. (2010); Reed et al. (2013); Diduck et al. (2015). These process criteria are as follows: clear terms of references (TOR), early and ongoing public involvement, representativeness, deliberative procedure, authenticity, transparency, accountability, and effectiveness. These criteria have been briefly described as follows:

a. Clear terms of reference (TOR)

Clear terms of reference provide the basis for developing objectives, purposes and strategies for the participation. However, there should be some flexibility so that purposes can be revised (if necessary) when circumstances changes or new information arises.

b. Early and ongoing involvement of public

The public should be involved as early as possible and throughout the process, from the initial levels of planning to the operational level. Early involvement provides opportunities for key

stakeholders to influence normative decisions, and the ongoing involvement helps to have influence at the operational level.

c. Representativeness

Key public and other relevant stakeholders should be identified and systematically included. The participants should represent the sample population affected the most by the decisions made. Additionally, important interests that are not actively engaged should also be considered.

d. Deliberative procedure

The procedure ensures availability of skilled facilitation, integration of local and scientific knowledge, and face-to-face conversations; it also fosters consensus as the mechanism of decision-making.

e. Authenticity

Authenticity refers to the trustworthiness of a participation process and includes assessment of the following: if the participation process has enough time and resources (human, technical, and financial) to meet its objectives; if the participation process is unbiased and safe for dialogue; and if the process provides enough incentives to foster active participation.

f. Transparency

Transferability refers to the clarity of the whole participation process to people within and outside of the procedures and implies openness of information flow and accountability by those responsible for making and implementing decisions.

g. Accountability

Accountability refers to the responsibility of different actors to justify their actions and decisions. It includes mainly three lines of accountability in the case of public participation in resource/environmental management: the accountability of the participants to their representative organizations; the accountability of implementers and practitioners to the participants in the participation process; and the accountability of policy-makers to the citizens.

h. Effectiveness

Effectiveness assesses if the participation process was successful in meeting its purpose and objectives. Effectiveness can be measured by the proportion of participants who are satisfied with the public involvement process (CCFM, 2003). Sometimes, satisfaction is considered a proxy measure since it is difficult to measure effectiveness directly. However, due to various

external and internal factors, practically it becomes important to be efficient and to achieve an optimal level of effectiveness, particularly if time and resources are limited.

2.2.4 Summary

This section of the chapter defined public participation, explained why it is needed, introduced some methods of public participation, and described criteria for evaluating public participation. The following section provides an overview of public participation, particularly in forest management in Canada.

2.3 Public Participation in Forest Management

This section of the chapter first explains how public participation in forestry in Canada evolved and then explains how public participation has been integrated into forest management policies and regulations. The section ends by explaining how social values in forest management have been integrated in criteria and indicators for SFM.

2.3.1 Evolution of Public Participation in Forestry

The democratic urge in forest management across Canada is reflected in the environmental movement (1960s) in terms of policy reforms and public processes (Parkins, 2006). Historically, the public were less involved with the government and forest product industries in decision-making process regarding the management of public forests (Parkins, 2006). This lack of opportunity for an effective public engagement in the forest sector resulted in a call for a “re-orientation of the hierarchical, control- and regulation-oriented structure of state forest management...” to a more cooperative and democratic approach encompassing both increased public involvement and dissemination of management responsibility from the government to a locally-based system (Vira, 1997, p.11).

One of the significant steps towards more participatory policy approaches in forestry occurred in 1987, when the newly established CCFM held a forestry forum in which representatives from different sectors such as government, industry, and a small group of non-governmental organizations discussed issues and provided advice based on multi-stakeholder exercises. Although this session could not incorporate many stakeholders, it did provide a platform where different views could be represented. Since the 1990s, the public has been

demanding greater engagement in decision-making procedures and the decentralization of management control by democratizing forest policy processes (Rollins et al., 2001).

As a result, the requirement to involve public in management of public forests is integrated in forest management policies and regulations throughout the country. Many provincial governments have mandated public participation in forest management licensing procedures by law (Parkins, 2002). In addition to provincial legislation, the third-party certification systems used in Canada, e.g., the CSA's Sustainable Forest Management system (CSA, 2002) and the FSC's National Boreal Standard (FSC, 2005), also require on going public participation in forest planning and monitoring as a condition for certification.

2.3.2 Public Participation as a Key Measure for Criteria and Indicators for SFM (based on CCFM's criteria and indicators framework for SFM)

“Sustainable forest management is a way of using and caring for forests so as to maintain their environmental, social and economic values and benefits over time” (NRC, 2017). This definition shows that sustainability includes not only values associated with the forest resources but also social values. Consideration of integrating social values into forest management practices is reflected in the criterion of ‘society’s responsibility’ as an important component of CCFM’s criteria and indicators framework for SFM (CCFM, 2003). This criterion also recognizes the dependence of Canadian people on the forestry sector and their corresponding responsibilities (Parkins & White, 2007). The connection between the forest and forest-dependent people within these forest landscapes validates the need to consider the people affected, to share forest-derived benefits, and to grant additional responsibilities for community and forest sustainability (Bullock et al., 2017).

An element known as ‘fair and effective decision making’ under ‘society’s responsibility’ criterion in this framework has emphasized the integration of social values held by forest-dependent people through public involvement as an effective means to achieve SFM. Most often the effectiveness of public participation in forest management has been measured by the quantity of public involvement, but ‘fair and effective decision making’ helps to consider the quality of public participation process in forest management in Canada. Similarly, Mitchell (2002) put forward that more than simply attendance, effective public involvement in SFM requires other crucial elements, for instance: trust, communication, opportunity, and flexibility. Further, Parkins

(2002) suggested that effective public participation in forest management includes consideration of the values related to the forest and the concerned stakeholders, as well as the impact of management decisions on the public.

Currently, the public can participate in the management of forest resources in three ways. First, people can be involved at the provincial level when forest policy is being reviewed; second, people can participate during land use planning; and, third, they can become engaged during the development of forest management plans by the forest product companies (FPC). My research focuses on the forest-sector advisory committee (FAC) which represents the third way. This forest-sector advisory committee (FAC) is a primary mechanism adopted by the FPCs for the public consultation in forest planning processes in Canada (Parkins, 2002; Beckley et al., 2006; Parkins et al., 2006). These advisory committees are drawn from the local community and provide advice only, while the FPCs and government agencies make and implement final decisions.

2.3.3 Summary

This section reviewed the evolution of public participation in forestry and identified a common form of public participation method in the forestry sector. The following section provides an overview of the forest-sector advisory committee (FAC), identifies its purpose, and reviews studies of FACs.

2.4 Forest-Sector Advisory Committees

The FAC is a community-based public consultation forum comprising local forest stakeholders, including people who use the resource for their livelihood, recreational users, private companies, representatives of other agencies such as educational establishments and the business community, Indigenous representatives, and other levels of government. FACs mainly provide a platform to the forest stakeholders and rights' holders to put forward their perspectives, forest values, social values, and advice on forest management planning and local decision-making (Parkins et al., 2006). However, the advice/recommendations provided by FACs are rarely binding. Final decision-making power for forest management plans remains with the sponsoring agencies, primarily FPCs and government agencies.

Documentation of the origin of these advisory committees is sparse. In provinces such as

Ontario, these advisory committees, commonly known as Local Citizen's Committees, were legally established by Ontario Ministry of Natural Resources in 1994 to provide input for forest management plans and to monitor the implementation of the plans (Hunt & McFarlane, 2007). The FACs in provinces such as Alberta, Manitoba, and New Brunswick have been formed mainly by FPCs (Parkins et al., 2006).

One of the major differences among FACs across the nation is their sponsoring agencies. For example, in Ontario primarily they are sponsored by the provincial government and in Quebec FACs are sponsored by both government agencies and FPCs. In other provinces such as British Columbia and Alberta FACs are sponsored mainly by FPCs (Parkins et al., 2006).

There is no central registry of FACs; however, in 2004 Parkins and his team had identified 196 FACs across the nation (of which only 102 participated in the study). The FACs generally had 10-20 participants representing different stakeholders, and these committees often had terms of reference that define the purpose of the committee, recruitment process, and decision-making process. The committee member's involvement was primarily voluntary with some compensation for travel expense, and free dinners during the meetings (Beckley et al., 2006; Parkins et al., 2006).

The general purpose of these advisory committees is to enable concerned stakeholders to participate in discussions about forest management and provide suggestion to the FPC on forest planning processes and operations (Wellstead et al., 2003). Besides FPC, committee members also benefit from this forum through capacity building, social learning, conflict resolution, and networking (Beierle, 2002). However, Lynn and Busenberg (1995) have identified a few potential drawbacks of these advisory committees: for example, the views of the committee might not effectively reflect the opinions of a wider public, and, as a result, there is a risk the public may not support the perspectives of the advisory committees.

McGurk, Sinclair, and Diduck (2006) studied three FACs in Manitoba and determined several strength and weakness associated with them. According to the authors, a significant strength of the committee process was the practice of using numerous techniques to engage committee members. Because of this engagement, committee members were willing to share information and their learning. Committee activities were very open and transparent when their participants exchanged ideas. On the other hand, one of the prominent flaws noted was that members of the committees were not fully accountable to their respective organization regarding

their committee activities. The other weakness was that the advisory committee failed to acknowledge the position of First Nations as unique governments.

In 2004, Parkins et al. conducted a national survey of FACs to evaluate the effectiveness of FACs as mechanisms for public participation in forestry. In the survey, most of the respondents (94%) agreed that they learned new perspectives on forest management after joining the FACs and most surveyed members suggested a need to accommodate different views in forest management processes (Parkins et al., 2006). Nevertheless, the study also revealed that these committees have traditionally been male-dominated and identified several factors that limited women's nominal and effective participation. Hence, the limitations to women's involvement likely restricted the deliberations within the committees. These issues are discussed in more detail in the following section.

This section provided an overview of the Canadian FACs. The following section begins by explaining the concept of sex and gender, then it explains different waves of feminist movements, before explaining different types of participation, mainly nominal versus effective participation. Finally, it ends with explaining a need to explore women's access to, and participation in, forestry-decision making in developed countries such as Canada.

2.5 Gender and Natural Resource Management

In the 20th century, there was a drastic change in the conceptualizations of sex, gender, and feminism, a shift that is still evolving. Sex is a biological classification based principally on reproductive potential, whereas gender is the social explanation of biological sex (Eckert & Penelope, 2013). According to Eckert and Penelope (2013), the definition of the biological classification of male and female, as well as people's acceptance of themselves and others as male or female, is ultimately social. Similarly, Anne Fausto-Sterling (2000) argued "Labeling someone a man or a woman is a social decision. We may use scientific knowledge to help us make the decision, but only our beliefs about gender – not science – can define our sex." (p. 3).

With the aim to eliminate legal inequalities between men and women, the First wave feminists, also known as the early feminist movement, came into the limelight in the early 20th Century (Khalid & Gokhale, 2006). In the 1960s, the Second wave feminist movement advocated for equality between men and women, thereby calling for discrimination and oppression of women and minority groups to be stopped (Khalidi & Gokhale, 2006). In the mid-

1970s, the Third wave feminist movement emerged. Within this movement, ‘ecofeminists’ argued that how women and men interact with the environment was different (Banerjee & Bell, 2007). For example, ecofeminists theorized that because of women’s role in reproduction, they would be ‘closer to nature’ and place more value on environmental protection than men. Much of the early literature was viewed as ‘essentialist,’ meaning that women had certain ‘essential perspectives’ derived from their biology. Academic ecofeminist scholars today do not necessarily subscribe to this essentialist thinking (e.g., MacGregor 2004). Some feminist scholars have embraced a definition of feminist environmentalism due to discomfort with this position (e.g., Agarwal, 1992, 1998). Feminist environmentalism emphasizes the material basis for the variances in how men and women interact with the environment. For example, women and men had different interactions with the environment because they use it for different reasons. Some of this literature has emerged from global south such as India and Nepal where women are primarily responsible for gathering of firewood and fodder whereas for men their primary concern was timber (Agarwal, 2010a). Nevertheless, feminist scholars in the global north have also considered the material differences as important ways to account for gender-based differences in human-environment relations (Banerjee & Bell, 2007).

Globally, a large volume of published studies describes the relationship between gender and environmental decision making. However, much of this work is dated. A search through Web of Science and Google Scholar in September 2017 using the search terms “public participation in environmental decision making,” “public participation in natural resource management,” “public participation in forest management,” “gender and natural resource management,” and “gender and forest management” revealed that most of the research has been conducted in the global south, particularly in South Asia, Africa, and Latin America. It was noted that the purpose of this research was different in the “developing” and “developed” regions. For example, most of the research on gender studies of forest management conducted in developing countries relates to the empowerment of women and enhancement of their livelihood, such as studies on community-based forestry in Nepal and India (e.g., Agrawal & Ostrom, 2001; Agarwal, 2010; Risal, 2011). In contrast, in developed countries, the research mainly covers gender structures and perceptions of forests, as well as their impact on the policies and practices related to SFM (e.g., Reed & Varghese, 2007; Arora-Jonsson, 2008; Richardson et al., 2010; Reed & Lidestav, 2011).

Women's Participation in Decision-making

Research about public participation has revealed that the type of knowledge and perspectives brought to the table by individuals is influenced by social organization and practices (Reed & Davidson, 2011). Reed and Davidson (2011) suggest that men and women behave in relation to broad social practices and situations to impact the types of perspectives and learning they provide during decision-making in community-based natural resource management. The perspectives and inputs vary with gender because men and women have different roles, responsibilities, and experiences within the community in relation to the natural environment (Mikkelsen, 2005; Varghese & Reed, 2012). This view has been supported by numerous studies. For example, Reed and Varghese (2007) showed that for those serving on FACs in Canada, women held stronger affiliation for intrinsic values of the forest compared to men, while men supported more utilitarian values. Consequently, male-dominance in FACs is likely to favour timber harvesting and reduce women's contribution towards SFM.

When considering participation in resource management, Agarwal (2001) developed a typology of participation based on the works of White (1996) and Pretty (1995) (see Table 2-2). She explained, "At its narrowest, participation is defined in terms of nominal membership and, at its broadest, in terms of a dynamic interactive process in which all stakeholders, even the most disadvantaged, have a voice and influence in decision-making" (Agarwal, 2001, p. 1624). According to people's activeness, she suggested that the highest level of involvement is interactive participation, in which an individual has both a voice and influence in the group's decision-making process; the lowest level is 'nominal participation,' in which an individual is least active and does not interact with the group. However, she argued that even at the highest level of participation (interactive participation), there are some limitations in accomplishing equity and efficacy, given prior socio-economic disparities and power relations in the communities.

Agarwal (2001) reflected on participation in her analysis of 'participatory exclusions,' referring to the type of 'exclusions within seemingly participatory institutions'. Based on her study of rural community forestry groups in India and Nepal, she demonstrated how apparently participatory institutions have ignored a significant portion of the society, especially women. She explained how some factors (for example, social norms, perceptions regarding women's ability to contribute, and men being unwilling to share community structures) constrained

women's participation in these community-based organizations. Hence, gender is a social construct that can potentially result in 'participatory exclusions' of women expressed in natural resource management (Agarwal, 2001). Agarwal's construct has been shown to be relevant even in the global North, where conditions for women may be viewed as more equal to men than in the global South (Lidestav & Reed, 2010).

Table 2-2. Typology of participation

Level of participation	Characteristic features
Nominal participation	Belonging or being a member of a group
Passive participation	Being informed of decisions or attending meetings and listening on decision-making without speaking up.
Active Participation	Expressing opinions, whether or not solicited, or taking initiatives of other sorts
Interactive (empowering) participation	Having a voice and influence in the group's decision

Source: Adapted from Agarwal, 2001

Although women may be more equal in northern countries than in other societies, gender-based assumptions and practices are widespread and are often taken for granted. These assumptions and practices restrict women's participation and alter the types of decisions that are made (Varghese & Reed, 2012). These 'blind spots' are essential to evaluate as they "become invisible and lead us to disregard the important ways in which they structure the process and determine outcomes" (Arora-Jonsson, 2008, p. 50). Importantly, these 'blind spots' are evident in post-industrial countries like Canada and Sweden as well as in developing countries like India and Nepal (Arora-Jonsson, 2008; Lidestav & Reed, 2010).

Two forms of participation-nominal and effective participation-in the context of Canadian resource management have been distinguished by Reed and Varghese (Reed & Varghese, 2007; Varghese & Reed, 2012). According to the authors, nominal participation refers to 'the simple demographic representation of particular-groups in society,' whereas, effective participation is a form of 'active and engaged' participation where participants are engaged while formulating rules of forest use, monitoring, deciding on cost and benefit sharing, and conserving and rejuvenating the resources. Both Agarwal, and Reed and Varghese agree that though

nominal participation is very limited, it is an important step to secure a 'place at the table' for the marginalized groups, such as women.

Reed and Varghese (2007) suggested that these two forms of participation are linked in that women tend to participate more effectively when sufficient numbers of women are present during the meeting. This view is supported by the concept of 'threshold representation' (Kymlicka, 1995, p. 147) or 'critical mass' (Agarwal, 2010b), which is broadly defined as the specific percentage of women required to provide a balanced and effective presence (Agarwal, 2010b). The question of 'critical mass' remains contentious; however, the figure of one-third is the most accepted proportion for gender quotas at various institutions worldwide (Dahlerup, 1988).

Unlike nominal representation, effective participation suggests that women have a 'place at the table' and they are heard once they are placed in decision-making organizations. However, women's representation or attendance does not ensure their effective participation in decision-making processes. Various studies have pointed to this fact and have concluded that while women have been present in resource management forums, they have had little input in decision-making processes (Brasell-Jones, 1998; Sloan et al., 2004; Kafarowski, 2005; Natcher, 2013; Staples & Natcher, 2015). Hence, even though women participate, it does not necessarily follow that they have a 'voice at the table' (Varghese & Reed, 2012).

This view was further investigated by Arora-Jonsson (2008) who found that opportunities to speak and be heard depend on social and power relations between men and women. For example, from studies she conducted in villages in India and Sweden, Arora-Jonsson (2008) concluded that societal restrictions constrain women's ability to speak out in the presence of older male relatives. These constraints include agreeing with decisions that might not be their priorities or may even conflict with their own choices. Arora-Jonsson (2008) argued that these constraints undermine the notion of effective participation and sustainable resource management. Thus, the intersection of gender and participation in environmental management make it essential to clarify "that gender is an analysis of power relationships and the practices through which what is a 'man' or 'woman' get defined and made to appear as natural in different environmental contexts" (Arora-Jonsson, 2014, p. 2).

Effective participation provides women with a representative voice that is both inherent and influential (Agarwal, 2010a). Nevertheless, assessing the notion of participation in

community-based decision-making bodies can be challenging. A large amount of research on the relationship between gender and resource management has been conducted in the developing regions, for instance, in Asia and Africa, where gender and natural resource management has received substantial consideration (Lidestav & Reed, 2010). On the other hand, attention to gender relations in forest governance has largely been overlooked in developed countries, such as Canada (Arora-Jonsson, 2009; Staples, 2014). This gap can be attributed, in part, to the perception that gender balance has been accomplished and is no longer relevant in the developed world (Arora-Jonsson, 2008; Varghese & Reed, 2012). As a result, scholars tend to assume that natural resource management is gender-equitable and thereby disregard the significant ways in which social and gender relations “structure the process and determine outcomes” (Arora-Jonsson, 2008, p. 50). However, a national survey conducted in 2004 across Canada revealed that FACs had traditionally been male dominated, with women comprising less than 20 percent of their membership (Parkins et al., 2006). Furthermore, this survey revealed that there were gender differences in the preferences and forest values brought to the table (Reed & Varghese, 2007). With male dominance in FACs, it is likely that these FACs were more likely to recommend economic uses of forests than preserving the inherent values of forests. These expectations – that men are more likely to support economic uses while women are more likely to support intrinsic uses – have become taken for granted and the imbalance in women’s participation has been attributed to disinterest in forest management.

Little has been done to explore women’s access to, and participation in, forestry-decision making. Furthermore, no studies have followed up to determine whether there has been any improvement in gender representation over time or to ascertain whether or how the interplay of actors, interests, and decision-making processes have continued to be influenced by gender in Canadian forest sector FACs. Hence, it is not known whether expectations about the role of women and men in forestry and in decision-making remain linked to cultural expectations or norms related to their gender. Accordingly, the purpose of this study is to evaluate the extent to which public participation processes retain gendered norms and expectations of FACs’ participants. Specifically, I will explore the nominal and effective participation of female and male participants in FACs across Canada to determine if they have changed since the last national survey in 2004.

CHAPTER 3

METHODS

3.1 Research Approach

The study used a mixed-method approach that combined quantitative and qualitative approaches to better understand the problem, using both numbers and words (Creswell & Clark, 2007). The mixed method approach was adopted to help answer research questions that could not be resolved by a single method; as well, it offered a practical approach to this study (Creswell, 2003). In the initial phase, a sequential explanatory design was used to collect and analyze quantitative data from a national survey in order to inform the conduct of a second phase. In this second phase, supplementary qualitative data were gathered via interviews to enhance, enlighten, or contest the statistical findings from quantitative data analysis. Hence, a mixed-method approach comprising both quantitative (i.e., a questionnaire survey) and qualitative (i.e., a semi-structured interview) methods, was adopted for this study.

3.2 Methods of Data Collection

3.2.1 Questionnaire Survey

A national questionnaire survey of members involved in FACs was conducted in 2016 during the initial phase of the study. This survey involved researchers from the Universities of Alberta, Montreal, Manitoba, Saskatchewan, as well as the Canadian Forest Service. This survey asked many of the same questions as a national survey of FACs conducted by the same research team in 2004.

The survey process consisted of designing and administering two sets of questionnaires: one for the FAC members and the other for the chair of participating FACs (see Appendix B). The design of the questionnaires involved extensive interaction among all members of the research team over a four- to five- month period, and incorporated the feedback from a pre-testing phase. One of the challenges in developing these questionnaires was making them broad enough to be used across the nation and in various types of FAC settings and specific enough to cover some of the key issues raised in the literature. Another challenge was determining when to retain the original questions for comparative purposes and when to revise the questions according to new understandings of the issues.

Most of the questions in the member questionnaire asked in 2004 were retained in the 2016 version to allow comparison between the 2004 and 2016 datasets. Twenty-two of 30 questions were repeated verbatim in the 2016 survey, with other four questions asked in a modified form. The member questionnaire was divided into three sections. The first section included questions on representation, including why the respondents participated on the committee, whose views were represented, whether they thought the committee represented the values of all the interested and affected stakeholders, and how they would rate forest values statements. The second section was mainly about the committee process and deliberation that concerned the understanding of the committee purpose, the sources of information about forest management used by the committee, opinions on the quality and extent of committee discussions and performance, and the perception of respondents on the effectiveness of the committee. The members were also asked who was more influential in setting the agenda for the meetings, what they learned from participating on the committee, and in which situations they felt pressured to agree with committee decisions. The last section asked the respondents about their demographic information. The 2016 questionnaire included new statements and open ended-questions that were not considered in 2004. These new statements yielded more valuable qualitative information on societal perspectives, social learning, and the role of climate change in forest management deliberations.

The chairperson questionnaire was briefer and was designed to generate basic information on purpose, composition of FAC, recruitment, and reimbursement available to board members. The 2016 format of this questionnaire covered almost all the same questions as 2004 (14 of 16 questions were repeated verbatim), but there were additional questions on the purpose of the committee, important issues that the committee had pursued, the affiliation and term of the chair, demographic information of committee members, access of the public to meetings, meeting outcomes, and common reasons of why people left the committee. Both English and French versions (for Quebec and New Brunswick) of the questionnaire were developed. Pre-testing was conducted in March 2016 before final amendments were made.

3.2.1.1 Selection of FACs

Even though FACs are the most common method of public involvement in the Canadian forest sector, there is no central registry of advisory committees. Hence, it was not possible to

have a complete census at national and provincial levels. The FACs were identified by members of the research team through an extensive online search, through the forest-sector industry and government contacts across Canada, and through academic and researcher contacts working on forest governance issues in Atlantic Canada, Quebec, Ontario, Manitoba, Alberta, and British Columbia (see Table 3-1). One hundred and thirty-two FACs were identified nationwide, far fewer than the 196 FACs identified in 2004. This decrease was mainly attributed to the forest management restructuring going on in Quebec, where the number declined from 108 FACs in 2004 to 38 FACs in 2016. Around 27 % of FACs (n=21) participated in the both 2004 and 2016 surveys. Among the 132 FACs initially identified in 2016 survey, only 79 responded and agreed to participate in the survey. Another challenge was to determine if, in fact, 132 committees were actually active. Given the non-response of many committees, it remains unclear if websites for some of the 132 were simply ‘still existing’ after the committee had disbanded. Some of the reasons stated for not participating were that they were currently non-functioning, they were newly established so were not yet ready to participate in a survey, and they were simply not interested. Table 3-1 provides details of survey coverage of FACs and respondents by province.

In most instances, the committee chairperson or facilitator or key contact person was contacted by email or phone first to explain the purpose of the study and ask for their participation in the survey. Clarification was provided on the research objectives, the extent of the member’s potential involvement, and issues around data confidentiality. Once the chairperson confirmed that committee members were willing to participate, they were provided with a unique online link to send on to individual committee members, enabling them to complete the questionnaire. In some cases, FACs members were provided with a direct online link to the questionnaire, and, in other cases, questionnaires were also sent via mail. The primary criterion for participant inclusion was membership (past or present) in a forest FAC that operates in Canada.

The survey was conducted using an online platform designed by the Social Sciences Research Laboratories (SSRL), University of Saskatchewan, and hosted through a third-party provider, Qualtrics. Prior to launching the survey in early April 2016, ethical clearance was obtained from the Behavioral Research Ethics Board of University of Saskatchewan (see Appendix C). The survey was also pre-tested with a small number of people who had participated in other similar kinds of natural resource advisory committees. However, in the case

of Quebec, due to the delay in identifying functioning FACs, the survey was distributed throughout May and into early June 2016. Reminder emails were sent at regular intervals to participants to complete the online questionnaire survey and a reminder letter with a second copy of the questionnaires was sent to the members who had not returned the first copy of questionnaire by the second week of May 2016. These actions helped to improve response rates of the survey.

Table 3-1. Survey coverage of FACs and respondents by province:

Province	No. of committees identified	No. of committees participating	% of all committees represented	Total committee members surveyed	No. of respondents (Members)	% of respondents (Members)
British Columbia	22	14	17.7	228	69	20.1
Alberta	26	7	8.7	94	48	14.0
Saskatchewan	3	3	3.8	93	23	6.7
Manitoba	2	2	2.5	31	13	3.8
Ontario	34	24	30.4	230	106	30.9
Quebec	38	24	30.4	267	50	14.6
New Brunswick	4	3	3.8	49	13	3.8
Nova Scotia	2	1	1.3	16	6	1.7
Newfoundland and Labrador	1	1	1.3	47	15	4.4
Total	132	79	100		343	100

Responses from the online survey were entered automatically through the online platform Qualtrics, and those responses from hard copies were manually entered into Qualtrics by one of the research members. After the online survey was officially closed at the end of June 2016, the datasets were merged and exported into SPSS software for statistical analysis. All the quantitative data were analyzed using SPSS, and before quantitative data were analyzed, data were cleaned to remove errors and anomalies to ensure the highest quality data for analysis purposes. Statistical significance was analyzed using the chi-square test of independence and independent samples of t-tests as appropriate. Significance levels were set at the 5% level for statistical analysis. The data from 2016 were compared with results from the survey conducted in

2004 to determine whether there had been any improvement in gender representation over time and to ascertain whether or how the interplay of actors, interests, and decision-making processes have continued to be influenced by gender in Canadian FACs. However, in the 2016 survey, the sample size, for both chairs and members was smaller and included a different set of participants than the 2004 survey. These differences made a statistical comparative analysis of the two sets of data impossible and constrained the ability to draw more general conclusions about the changes that have occurred across the years. All the qualitative data from the open-ended questions were exported into Qualitative Analysis Software- *NVivo* 11 for further analysis.

The number of FACs that participated in the chairpersons' survey (n=66) was different from the members' survey (n=79), as some FACs participated in one survey and not the others.

3.2.2 Response Rates

This section presents the response rates of the survey of committee chairs and committee members, respectively, for 2016. In addition, it compares the changes in the response rates with those of the 2004 survey, followed by the possible reasons that contributed to the lower response rates in the 2016 survey, both for chairpersons and members.

3.2.2.1 Chairpersons Questionnaire Survey

In the 2016 survey, 92 questionnaires were sent to the chairpersons across Canada via direct and indirect links (email) and post. Of the 92 questionnaires sent, only 42 chairs completed the survey, resulting in an average response rate of 45.7%. The details of the survey response rate as per the survey mode are presented in Table 3-2a. The largest proportion of respondents were from Alberta, British Columbia, and Ontario and contributed response rates of 100%, 92.9%, and 76%, respectively. The lowest response rate was from Quebec, with a response rate of 47.1%. Later, the response rates were increased by an abridged telephone survey, where 24 of 34 chairpersons were contacted, of whom 24 participated, giving a response rate of 70.6% (see Table 3-2b). The overall distribution of the respondents (chairs) in various jurisdictions is presented in Figure 3-1. The Prairie region included Manitoba and Saskatchewan, and the Atlantic region included Newfoundland, Nova Scotia, and New Brunswick. As Table 3-3 illustrates, there was a significant decline in the response rates in the 2016 survey compared to 2004.

Table 3-2a. Response rates for FAC chairs survey

Survey mode	Number of chairs sent survey	Number of respondents	Response rate
Direct Link	57	27	47.4%
Indirect Link	34*	14	41.2%
Paper Survey	1	1	100.00%

*Estimated number of chairs that were sent the survey through a contact person

Table 3-2b. Response rates for abridged chairs survey

Survey mode	Number of chairs sent survey	Number of respondents	Response rate
Abridged Telephone Survey	34	24	70.6%

Table 3-3. Overall response rates of FAC Chairs in 2004 and 2016 surveys

Year of survey	Number of chairs contacted for a survey	Number of respondents	Response rate (%)
2016	126	66 (42 responded full questionnaire + 24 responded to the abridged telephone questionnaire)	52.4
2004	125	101	80.8

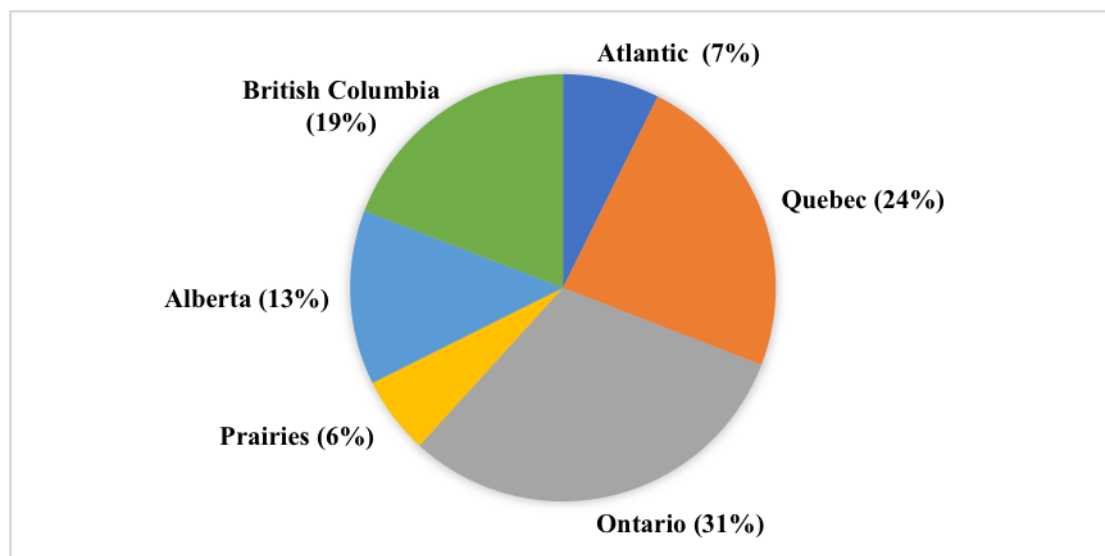


Figure 3-1. Overall distribution of respondents (chairs) to 2016 survey, by region

3.2.2.2 Members Questionnaire Survey

In the case of member questionnaires, of the 635 questionnaires sent directly to FAC members across Canada, only 253 were completed, for a response rate of 39.8%. The highest number of respondents was from Ontario (53.5%), Alberta (46.8%), and British Columbia (44.5%). The lowest rate of response was from Quebec (18.8%), New Brunswick (28.2%), and Saskatchewan (32.7%). The overall distribution of survey respondents is depicted in Figure 3-2.

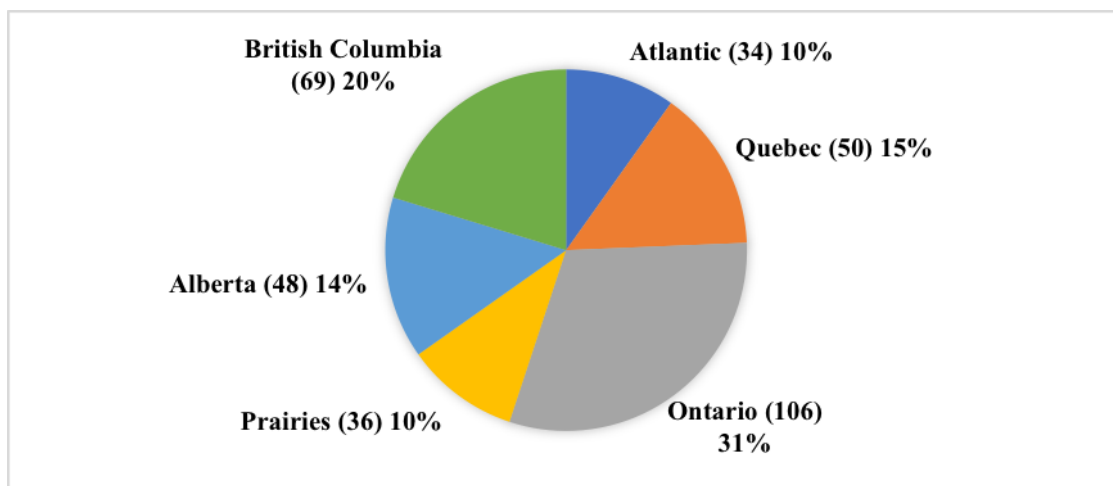


Figure 3-2. Overall distribution of respondents (members) to 2016 survey, by region

For FAC members who were sent the questionnaires through a third party it was difficult to determine exactly how many members were sent the link by the contact persons. For example, it was found that of 39 advisory committees that received the member's questionnaire through third parties, in 15 cases there was not a single response to the survey. Hence, considering the national average, it was suspected that for at least some of 15 or all committee members, the links to the questionnaire survey were never sent on by the third parties. For this reason, the response rate of the survey through the indirect link was estimated, considering only 24 committees (FACs from which at least one of the members had responded to the survey). For the hard copy questionnaire (via regular mail), only 16 of 72 members returned a completed copy, making a response rate of 25%. The summary of response rates for FAC Members (2016 Survey) is presented in Table 3-4a. As can be seen from Table 3-4b, the overall response rate in 2016 survey decreased by 17.3%.

Although the reasons for lower response rates in the 2016 survey are not initially clear, several factors may have been at play. The lower responses to the survey through a third party and regular mail lowered the overall response rate. In the case of the survey through a third party, the committee chairs or contact persons were the key persons. The level of enthusiasm of those key persons for the survey as well as the rapport of members with the chairs might have affected the number of participants interested in taking part in the survey.

Table 3-4a Summary of response rates for FAC Members (2016 Survey)

Questionnaire accessed via	Number of members sent survey	Number of completed questionnaires	Response rate (%)
Online link sent directly to member	635	253	39.8
Online link sent to member by third party	416*	74	17.8
Hardcopy sent to member via the regular mail	72	16	25

*Estimated number of members that were sent the survey through a third-party link

Table 3-4b. Overall response rates of FAC Members in 2004 and 2016

Year of Survey	Number of members sent questionnaire	Number of completed questionnaires	Response rate (%)
2016	1123	343	30.5
2004	2256	1079	47.8

3.2.3 Semi-structured Interviews

After the preliminary analysis of survey data, semi-structured interviews were conducted to allow for more in-depth understanding of committee members' experiences, especially around gender-based differences in interpretations of effectiveness and satisfaction, observations of social learning, and the ways in which participants interpreted these experiences.

The interview questions were designed as probes to elicit rich descriptive data on the personal experiences of participants. The questions concerned themes covered in the survey and were divided into five main sections: participation; representation; representation of values; process and deliberation; and effectiveness (See Appendix D). The first section asked interviewees why they participated on the committee, what role they played, who they

represented, whether their expectations were met, and whether they had observed any significant changes in the time they had been involved in the committee. The second section concerned whether they thought the committee was representative of all interested and affected groups. The third section asked interviewees about different forest values that men and women bring to the advisory committee. The second last section concerned the committee process and deliberation use to assess the participation of men and women around the table. The final section asked interviewees whether they thought the advisory committee was effective and how its effectiveness could be improved in the committee's contribution to SFM. Pre-testing of interview questions was conducted with a small number of known members of FACs to determine the logical flow and proper order of the questions, as well as to estimate the time needed to conduct the interview.

The interviewees were mainly selected based on the composition of their FACs (i.e., the number of men and women as full members). In total, participants from three gender-balanced FACs (one FAC from Alberta and two FACs from British Columbia) and three gender-unbalanced FACs (one FAC from New Brunswick and two FACs from British Columbia) were selected for an interview (see Figure 3-3). For the purpose of this study, I have considered ratios of 40/60 as well as 50/50 to be gender-balanced as there were not sufficient number of FACs with 50/50 ratio of male and female even to conduct interviews. In terms of gender-imbalanced committees, two FACs with no female member (full) and one FAC with three female members (full) were selected for an interview. Additionally, two participants were selected for an interview based on their responses to the questionnaire survey. After the selection of FACs, an initial email request was sent to all the respondents (of the survey from those FACs) to determine if they were willing to participate in a follow-up interview. After approval was obtained from the interested respondents, another email was sent along with an introductory letter describing the research objectives and topics of interview questions.

Altogether, semi-structured interviews were conducted with 28 interviewees, with 16 representing balanced FACs and 12 unbalanced FACs. The two interviewees selected because of their survey responses were among those serving on an unbalanced advisory committee. Among the interviewees, there were six women from balanced FACs and three women from unbalanced FACs. So, in total, 19 men and nine women participated in this follow-up interview. Interviews were conducted with chairpersons (n=4, 14%), facilitators (n=3, 11%), and members (n=21,

Locations of FACs Interviewed

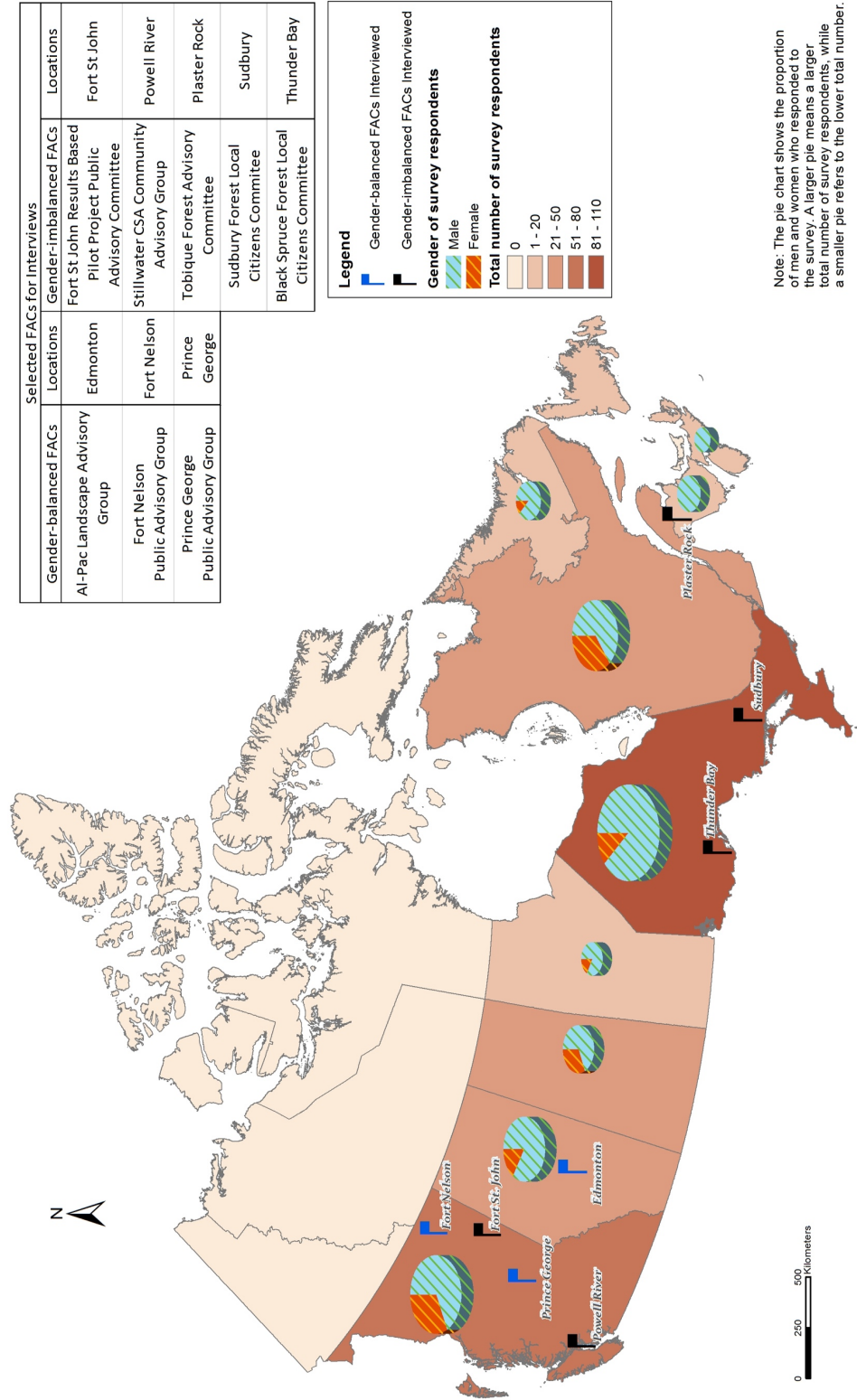


Figure 3-3. A map showing locations of FACs interviewed

75%) from different sectors, such as government agencies, forest licensees, hunting and fishing, wildlife, farming and ranching, forestry, small business, recreation, trapping and guide outfitting, indigenous groups, environmental groups, and the education sector (see Table 3-5).

I conducted all the interviews over the phone at the University of Saskatchewan from November to early December 2016. Time slots were provided to the interested participants through an email, and interviews were undertaken at their convenience. Interviews were conducted after obtaining consent from the interviewees over phone. Similarly, before starting the interview, consent was also obtained for making an electronic recording of the conversation. Interviews varied in length from 22 minutes to 51 minutes.

Completed interviews were transcribed with the help of a professional transcriber. Interview transcripts were revised before being imported into NVivo 11, a software package used for thematic analysis of interview data. Transcripts were analyzed developing lists of codes and nodes to see how men and women responded to selected themes. Quotes from the interviews were selected to illustrate examples that either strengthened or offered insights into the gender-based analysis of members of the FACs, based on participants' personal experiences.

The following chapter will provide the results of 2016 surveys of both chairs and members and will compare the survey results with the results of the 2004 survey to explore the changes that occurred over the years.

Table 3-5. Demographic characteristics of interviewees

Respondent No.	Gender	Survey ID of FACs	Role in the FAC	Years served on the FAC
1	M	NB003	Co-chair	15
2	M	BC011	Member (Cultural Advisory)	8
3	M	AB007	Member (Fishing games association)	25
4	F	BC011	Member (Farming and Ranching)	26
5	M	ON018	Chairperson	20
6	F	BC011	Member (Local Government)	12
7	M	ON006	Chairperson	12
8	M	BC005	Member (liaison for the board on this community advisory group for forestry)	3
9	M	BC011	Facilitator	2.5
10	F	BC011	Member (Conservation)	6
11	M	NB003	Member (Education)	10
12	M	BC011	Member (Hunting and fishing)	2
13	M	BC011	Member (Commercial wild life)	5
14	F	BC003	Member (Government representative)	15
15	F	BC003	Advisor of forest licensee	3.3
16	F	AB007	Member (Wildlife society)	6
17	M	BC005	Member (Forest Dependent Group)	14
18	M	BC001	Member (First Nations)	10
19	F	BC005	Chairperson	16
20	F	BC011	Member (Public Interest)	3
21	M	BC011	Member (Forestry workers and contractors)	10
22	F	BC001	Facilitator	11.5
23	M	BC011	Member (Recreation)	15
24	M	AB007	Facilitator	7
25	M	BC003	Member (Trapping and guide outfitting)	2
26	M	AB007	Member (Outfitter)	25
27	M	BC005	Member (Small business)	2
28	M	BC005	Member (Environment)	9

CHAPTER 4

COMPARING CHANGES IN FOREST SECTOR ADVISORY COMMITTEES SINCE 2004 (FROM A GENDERED-PERSPECTIVE)

4.1 Overview

This chapter presents the results relating to two of the research objectives: (a) comparing the changes in representation, perspectives and values represented, satisfaction and influence for men and women participating in public advisory committees since 2004; and (b) comparing women's and men's past and current experiences in participating in FACs. Primarily, this chapter provides the quantitative assessments of the questionnaire survey results to evaluate the representation, process and deliberation, and the effectiveness of FACs in contributing to SFM. The results of the 2016 survey were compared with the results of the 2004 survey and observed changes are reported in this chapter where appropriate. The results obtained from the interviews are reported and analyzed in the next chapter of the thesis.

This chapter assesses the current situation based on the findings of the 2016 survey and then compares them with the 2004 survey results to observe changes in the representation, values represented, influence, and satisfaction of the members participating in advisory committees. Furthermore, this chapter provides a detailed analysis of members' experiences of participating in FACs, as well as the differences experienced by men and women. The results of the survey of committee chairs and members are presented in turn. The first part presents the results of the committee chairs' survey, and the second part the results of the committee members' survey.

4.2 Results of the 2016 Survey of Committee Chairs and Comparison with the 2004 Survey

The questionnaire for committee chairs was mainly designed to obtain the background information on important committee attributes that would provide the context for understanding the responses of committee members to the questionnaires. This section presents the results of the 2016 survey of FAC chairs and then compares them with the results of the same 2004 survey. It mainly focuses on the following: representation of stakeholders on the committee; the committee size; committee sponsorship and facilitation; the recruitment process and member turnover; decision-making; and compensation for the committee members.

4.2.1 Representation of Forest Sector Stakeholders in Committees

The 2016 chairs' survey revealed that the forest company or enterprise, local community (organizations) and recreational organizations were the top three organizations represented in the FAC committees surveyed, while social service organizations and educational organizations were the least-well represented in most of the jurisdictions. Nevertheless, only five of 16 FACs surveyed in Quebec had representatives from local community organizations, and only one of four FACs surveyed on the Prairies had representatives from recreational organizations. All the FACs surveyed in Quebec, British Columbia, and the Atlantic region had representatives from environmental organizations, except one committee from British Columbia and one from the Atlantic region. Since there were no questions about the representative organizations on the committees in the 2004 chairs' survey, it was impossible to determine changes in representation in stakeholder groups from 2004 to 2016.

4.2.2 Committee Size

In the 2016 survey, the chairpersons were asked about the number of full members, alternates, and 'others,' and their demographic information. As Table 4-1 illustrates, the average size of the committee was 16. When compared with 2004 findings (an average number of committee members on the mailing list was 21), the size of the average committee had decreased by five. However, when the average number of committee members, including full members, alternates, and others (26), was compared with the 2004 data, the figure increased by five. The highest number of members on a committee was in the Atlantic region, and the lowest was in Ontario (see Table 4-1).

4.2.3 Demographic Information (based on full members)

As Table 4-2 reveals, the average number of male representatives was likely to be more than four times that of women representatives on a committee (men-13 and women-3). The data showed that FACs were highly imbalanced (male-dominated) with poor female representation. The highest number of women representatives on a committee was in Alberta (n=5, %=29), and the lowest was in the Atlantic region (n=1, %=4). The national average of Indigenous people on a committee was two (13%); the Prairies had the highest representation while Ontario and Atlantic region had the lowest. Moreover, the data indicated that over 90% of the committee

Table 4-1. Number of full members, alternates, and others, by region

Region	Survey 2004		Survey 2016		
	Average no. of committee members on the mailing list	Average no. of committee members (Full)	Average No. of (Alternates)	Average No. of members (Others)	Average size of committee members (including full, alternates, and others)
Atlantic	23	24	13	0	37
Quebec	21	18	11	7	36
Ontario	16	13	3	2	18
Prairies	46	16	6	4	26
Alberta	27	17	4	5	26
British Columbia	20	13	4	4	21
National Average	21	16	6	4	26

Table 4-2. Demographic information of full members, by region (Survey 2016)

Region	Average no. of committee members (full)	Men n [%]	Women n [%]	Indigenous people n [%]	Members from local region n [%]	Members under 40 years of age n [%]	Members from 40-65 years of age n [%]	Members over 65 years of age n [%]
Atlantic	24	23 [96]	1[4]	1[4]	23 [96]	4 [17]	17 [71]	3 [13]
Quebec	18	16 [89]	2 [11]	2 [11]	15 [83]	5 [28]	12 [67]	1 [6]
Ontario	13	10 [77]	3 [23]	1 [8]	12 [92]	2 [15]	9 [69]	2 [15]
Prairies	16	13 [81]	3 [19]	5 [31]	13 [81]	2 [13]	12 [75]	2 [13]
Alberta	17	12 [71]	5 [29]	2 [12]	11 [65]	3 [18]	12 [71]	2 [12]
British Columbia	13	10 [77]	3 [23]	2 [15]	13 [100]	2 [15]	8 [62]	3 [23]
National Average	16	13 [81]	3 [19]	2 [13]	14.5 [91]	3 [19]	11 [69]	2 [13]

members were from the local region. According to the chairs, the majority of the members (69%) were between the ages of 40 and 65 years, with 19% of members under 40 years and 13% over 65 years. Detailed demographic information of the committee members was not requested in the 2004 chairs' survey.

4.2.4 Committee Sponsorship and Facilitation

The sources of sponsorship for FACs varied across jurisdictions. The 2016 survey found that most FACs surveyed were sponsored by forestry companies. However, all six FACs from Ontario that participated in the survey were sponsored by the provincial government, while FACs in Quebec were sponsored by various agencies, such as the provincial government, municipal government, local community, and regional county municipalities (municipalité régionale de comté, [MRC]). Most of the FACs were sponsored by forest companies as these committees are mandatory for the certification process (FSC 2005 and CSA 2002). Regarding the facilitation of the meetings, it was found in the 2016 survey that most FACs surveyed in the Atlantic region and more than half in British Columbia had facilitators to run the committee meetings independent of the chairs, whereas, in Ontario, Quebec, and Alberta, the majority of the FACs surveyed did not have a facilitator (see Figure 4-1). The comparison of the results of two surveys revealed that the availability of facilitators in these advisory committees had decreased in 2016.

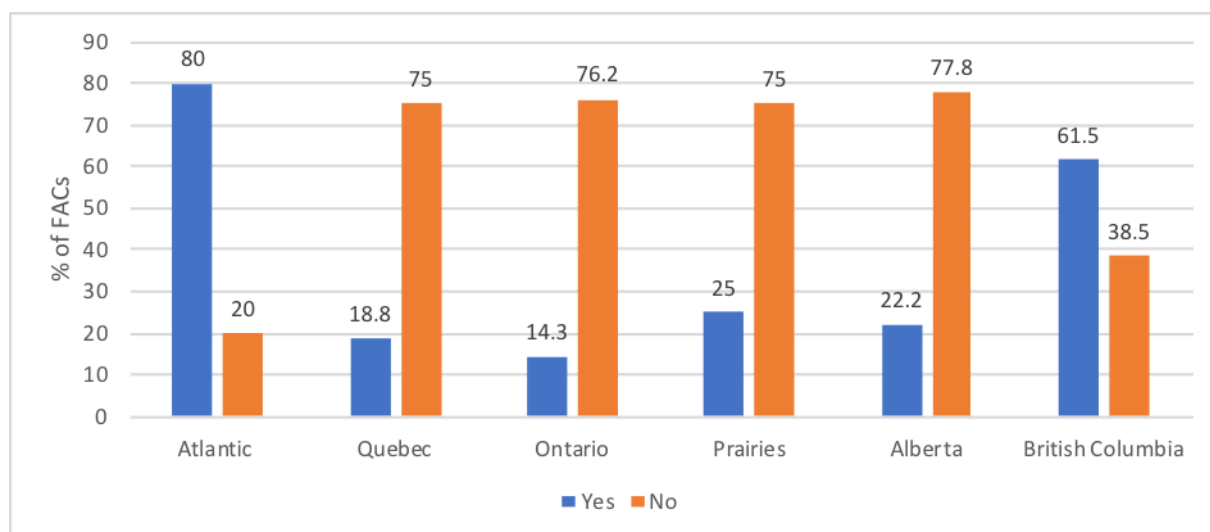


Figure 4-1. Availability of facilitators in FACs, by region (Survey 2016)

4.2.5 Recruitment Process and Member Turnover

Several means of recruitment were indicated in the 2016 survey. The major recruitment processes were word-of-mouth, recommendations by an existing member/influential member and by provincial government agencies (such as the Ministry of Natural Resources and Forestry District Managers), and newspaper advertisements. Indeed, 55.9% of recruitment efforts were reported as being informal. Potential members were also selected through engagement at public events and when interested organizations approached the committee. Most of the FACs in Ontario recruited their new members through the Ministry of Natural Resources and Forestry (which also sponsored these FACs). Recruitment processes implemented by surveyed FACs in 2016 are shown in Figure 4-2

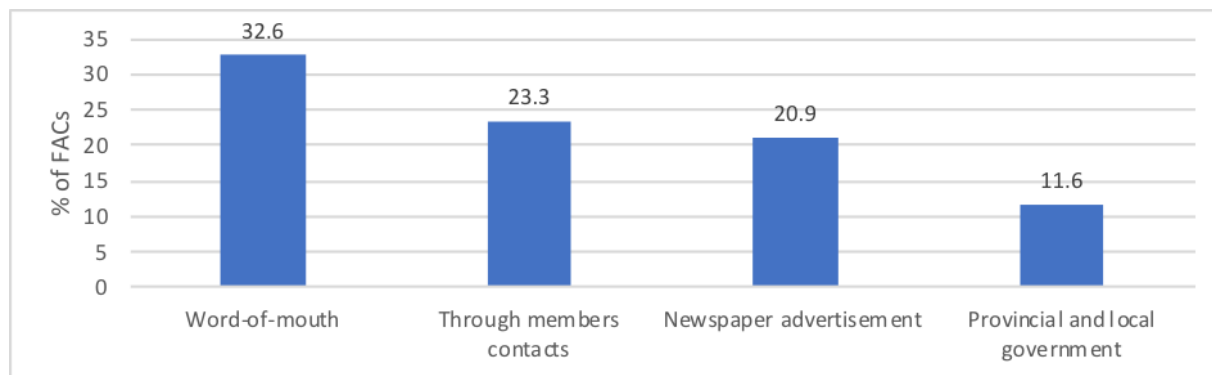


Figure 4-2 Different means of recruitment implemented by FACs (2016 survey, n=28)

Furthermore, in the 2016 survey, the chairs were asked to state whether potential members met certain requirements to be on the committee. The majority (66.7 %) of FACs surveyed reported that a potential member had to meet certain requirements. These FACs were likely to come from Ontario, British Columbia, and Quebec. The major requirements cited in the survey were the following: members must represent one of the areas of interest in the committee's terms of reference or a First Nation; they must be qualified to represent their sectors through their positions; they must regularly attend meetings; and they must be able to work in a consensus process.

The 2016 survey also asked the proportion of committee members who attended each meeting. Attendance was high, as almost 40% of the chairs surveyed reported attendance of 80-100% of members at each meeting, while 50% reported attendance of 50-79% of members. The

chairs were also asked to cite the most common reasons why members left the committee. More than half (52.4 %) of the chairs surveyed reported “other commitments take precedence” as the main reason for members leaving the committee (see Table 4-3). The other major reasons cited were members’ terms had ended, the meeting place was too far to drive, meetings were very time consuming, and disagreement with the direction the committee was pursuing.

When the chairs were asked about the changes in the composition of committee in the past three years, 74% of the respondents stated that there had been no significant changes, suggesting that the FACs are rather stable.

Table 4-3. Most common reasons for leaving the committee (2016 Survey)

Most common reasons for leaving the committee	% of FACs
Other commitments take precedence	52.4
Term is up	14.3
Too far to drive	9.5
Too much time required	7.1
Disagreement with the direction the committee is pursuing	7.1
Felt their time was not well spent	4.8
Conflicts with other members	0

4.2.6 Decision Making and Compensation for the Members

Most of the FACs were formed as a platform for public engagement to provide public views and advice on forest management planning and monitoring. In this regard, the FACs propose recommendations to the sponsoring agencies. When the chairs were asked about the decision-making process, 73.8 % of the committee chairs surveyed stated consensus as the primary mechanism of decision making (see Table 4-4).

Table 4-4. Type of decision making (Survey 2016, n=42)

Type of decision making	Number of committees, by region						Total no. of FACs	% of FACs
	Atlantic	Quebec	Ontario	Prairies	Alberta	British Columbia		
Consensus	3	8	5	0	6	9	31	73.8
Majority vote	0	0	3	1	0	0	4	9.5
Other; please explain (e.g., it is decision-dependent)	0	1	4	1	0	1	7	16.7

Regarding compensation for the members for attending meetings, very little was provided. The majority (68.3 %) of the FACs' members received compensation for transportation expenses only (see Table 4-5). Only 18.6 % of committees surveyed provided a per diem to the members attending the meeting. Other forms of appreciation included free meals and accommodation when necessary. No FACs surveyed reimbursed childcare expenses. These results from the 2016 survey were similar to the findings from the 2004 survey.

Table 4-5. Types of compensation for members of forestry advisory committees

Type of compensation	Number of committees, by region						Total no. of FACs in 2016	% of FACs in 2016	% of FACs in 2004
	Atlantic	Quebec	Ontario	Prairies	Alberta	British Columbia			
Transport expenses	2	6	15	2	5	11	41	68.3	52.5
Per diem	0	1	4	0	2	4	11	18.6	20.8
Child care expenses	0	0	0	0	0	0	0	0	0
Loss of income	0	0	0	0	0	0	0	0	2.9
Other	2	5	9	3	1	2	22	36.1	28.7

4.2.7 Summary

This section has reviewed the background information of several aspects of committees, primarily, the representation of forest stakeholders on the committee, the committee size, committee sponsorship and facilitation, decision making, and compensation for the members of FACs. The 2016 survey results showed that a higher proportion of representatives on FACs were from the forest company, local organizations, and recreational organizations. The average number of committee members (considering alternates and others) in FACs was about 20% higher in 2004 than in 2016. According to the 2016 survey results, Alberta had the highest representation of women on the committees, whereas the Atlantic region had the lowest. Most of the surveyed FACs in 2016 were sponsored by forest companies except for the advisory committees from Ontario and Quebec, which were sponsored by different government agencies. Regarding the means of recruitment of new members, 2016 survey participants reported that

most recruitment was done by word-of-mouth; however, in Ontario, committee members were mainly recruited by the Ministry of Natural Resources and Forestry. The chairpersons' survey also revealed that the composition of FACs was not much different in the two survey years due to low member turnover. In both 2004 and 2016, consensus was found to be the primary mechanism of decision-making for the majority of the FACs surveyed. Similarly, the types of compensation for members attending committee meetings were virtually unchanged in 2016. So far, this section has focused on the findings from the 2016 survey of FAC chairs and the relevant comparison with the results of the survey of committee chairs conducted in 2004. The following section presents the major findings from the 2016 survey of advisory committee members.

4.3 General Changes in Representation and Deliberation in FACs Since 2004

This section provides the results from the 2016 survey of FAC members and then compares them with the 2004 survey results to assess differences in results. This section mainly focuses on the differences between the responses of men and women on several aspects of committee attributes, such as committee involvement and the committee process and deliberation. Before proceeding to study the major findings of the survey, I explain the demographic characteristics of 2016 survey respondents.

4.3.1 Demographic Characteristics of 2016 Survey Respondents (members only)

As Table 4-6 illustrates, only 20.7% of the 2016 survey respondents were women, while 78.4% were men. The highest percentage of women respondents was from Quebec and the lowest was from the Atlantic region, although the chair's survey suggested Alberta had the highest number of women representatives on a committee. The average age of the respondents was 57.6 years, with Quebec having the youngest membership. Women respondents were about eight years younger than men (women - 50.8 years and men - 59.1 years). At a national level, the average proportion of respondents who identified as Indigenous was 9.0% (women: n=8, %=11 and men: n=22, %=8).%. The Prairies had the highest proportion of Indigenous members (20.0%) and Quebec the lowest (4.0%). More than half of the respondents (63.1%) reported belonging to a community or social service organization, and only 11.5% reported belonging to a natural history or bird watching club. The survey results showed that almost half of the respondents (47.9%) were associated with a household that depended on a resource-based industry. Regarding education, more than one-third had a university degree, with the highest

proportion of degree holders from the Atlantic region.

Table 4-6. Demographic characteristics of respondents (members)

% of respondents, by region							
Characteristic	Atlantic	Quebec	Ontario	Prairies	Alberta	British Columbia	Canada
Gender, Age and Indigeneity							
Men	94.1	66.0	85.4	72.2	80.4	71.0	78.4
Women	5.9	34.0	13.6	25.0	17.4	29.0	20.7
Age	54.3	47.4	60.8	58.1	60.3	59.6	57.6
Self-identified as Indigenous	11.8	4.0	6.9	20.0	15.6	4.4	9.0
Membership in club or organization							
Natural history or bird-watching club	4.2	5.9	15.9	3.8	8.8	17.3	11.5
Hunting or fishing organization	41.7	61.8	59.8	38.5	38.2	32.7	47.6
Environmental organization	16.7	44.1	26.8	34.6	35.3	30.8	31.0
Community or social service organization	58.3	41.1	63.4	57.7	76.5	73.1	63.1
Resource industry or agency-dependent household	50.0	38.0	50.5	42.9	54.3	48.5	47.9
Highest level of Education							
No high school diploma	0	0	5.8	2.8	6.5	0	2.9
High school graduate	2.9	0	9.6	16.7	8.7	8.7	8.0
Technical school or community college	23.5	24.0	30.8	16.7	28.3	23.2	25.7
Some university	5.9	8.0	7.7	22.2	4.3	10.1	9.1
university degree (bachelors)	52.9	38.0	26.0	22.2	30.4	36.2	32.7
Some graduate study	2.9	12.0	5.8	5.6	8.7	5.8	6.8
Graduate university degree	11.8	18.0	14.4	13.8	8.7	15.9	14.2

Comparing the demographic information of the respondents in the 2004 and 2016 surveys, the overall committee characteristics were not much different, except for some regional variances. The number of female respondents did not change very much (increased by 2%), but, interestingly, in Quebec and the Prairies the proportion of women who responded in 2016 was considerably higher than in 2004. In contrast, in the Atlantic region, the number of women respondents was substantially lower in 2016 than it had been in 2004 (see Figure 4-3). Nonetheless, overall, women were still clearly under-represented in the FACs surveyed in both years.

The average age of survey respondents increased by 7.5 years from 2004 (50.1 years) to 2016 (57.6 years). Similarly, respondents in 2016 reported having higher levels of education compared to those in 2004. Additionally, women were more likely to report higher levels of education than men in both the 2004 and 2016 surveys.

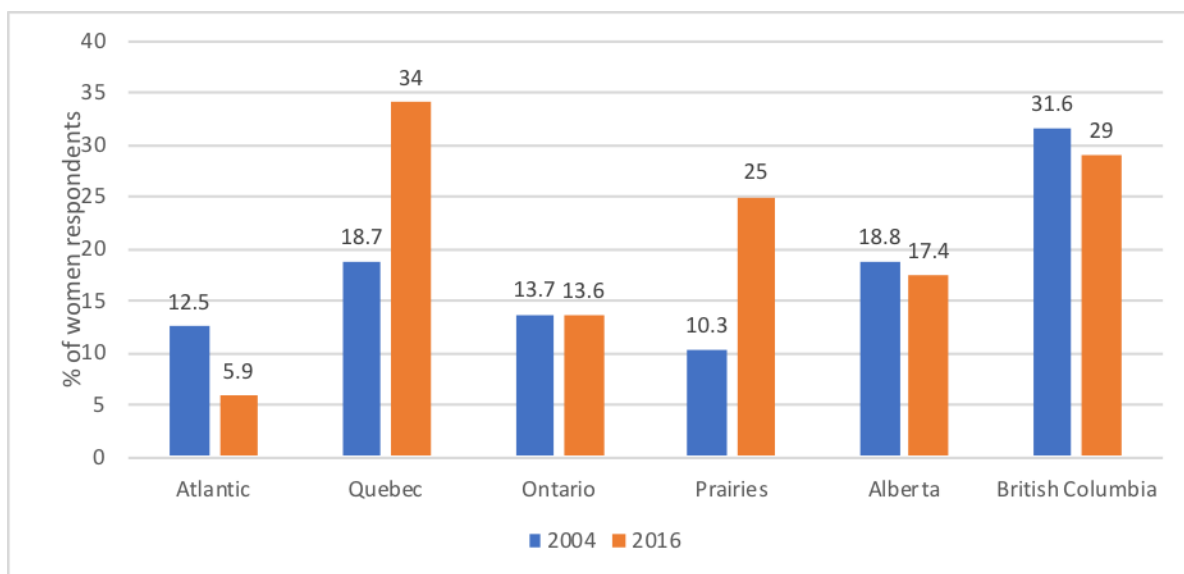


Figure 4-3. Change in representation of women over the years, by region

4.3.2 Representation

This section focuses on the members' survey results, particularly on the views respondents represented in FACs (stakeholder groups they represented), respondents' affiliations with other groups, the major reasons cited by the respondents for their participation on the committees, the forest values embraced by the respondents, and their opinion on whether FACs encompassed all the interested groups or not. Where appropriate, the results of the 2016 survey were compared with the results of the 2004 survey.

4.3.2.1 Views represented on FACs

In both the 2004 and 2016 surveys, the committee members were asked to select whose views (or stakeholder groups) they represented on the committee. Although the largest proportion of the 2016 survey respondents (both male and female) belonged to the community or to a social service organization (professional affiliation), there was variance in the views they were selected to represent (see Table 4-7). In the 2016 survey, the highest proportion of male respondents represented the ‘public at large’ and the highest proportion of female respondents represented ‘their own views,’ whereas, in the 2004 survey, the highest proportion of the respondents (men-17.7% and women-14%) represented the views of the ‘forest industry.’ The 2016 results also showed a significant difference between the views represented by men and women for a recreational group. Men were more likely to represent the views of a recreational group than were women. The results also revealed that in both 2004 and 2016, women were more likely to represent the views of environmental groups than were men; however, in 2016 a higher proportion of male respondents (10.6%) represented the views of an environmental group than in 2004 (2.4%).

Table 4-7. Representation of views by members of FACs

Views represented	Survey 2004					Survey 2016				
	Women		Men		Total	Women		Men		Total
	#	%	#	%	N	#	%	#	%	N
Recreational group*	7	3.9	84	9.7	91	3	4.3	51	19.2	54
Forest industry	25	14.0	153	17.7	178	8	11.4	49	18.5	57
Indigenous government	6	3.4	22	2.5	28	4	5.7	12	4.5	16
Environmental group	16	9.0	21	2.4	37	9	12.9	28	10.6	37
Public at large	13	7.3	48	5.6	61	12	17.1	60	22.6	72
My own	7	3.9	33	3.8	40	13	18.6	53	20.0	66
Provincial or federal government	16	9.0	81	9.4	97	5	7.1	15	5.7	20
Community or social service organization	2	1.1	8	0.9	10	3	4.3	18	6.8	21
Other resource industry	11	6.2	79	9.2	90	5	7.1	33	12.5	38

*p <5 % - gender significance according to Pearson’s Chi-square Test for survey 2016

4.3.2.2 Affiliations of committee members with other groups

When, in the 2016 survey, the participants were asked to indicate their affiliations with

other groups, the majority of participants (69.8% of women and 61.4% of men) indicated that they belonged to a community or social service organization, whereas a small number of respondents (18.9% of women and 8.6% of men) reported belonging to a natural history or bird-watching club (see Table 4-8). This result, when compared with the 2004 survey, suggested a greater representation from social service organizations and natural history or bird-watching clubs for both men and women. The survey results for both years showed that more women than men were associated with social service organizations and natural history or bird-watching clubs. Similarly, there was an increase in the number of respondents (both women and men) affiliated with environmental organizations in the 2016 survey compared to the 2004 survey.

Data analyzed from both the surveys also suggested that there was a significant difference between gender and affiliation. For example, for both years, more women than men were likely to be associated with environmental organizations. Also, men were more likely than women to belong to hunting and fishing organizations. However, the number of respondents (both men and women) belonging to both environmental and to hunting and fishing organizations was higher in 2016 than it was in 2004.

Table 4-8. Gender differences in affiliations of committee members with other groups

Affiliation with other groups	Survey 2004					Survey 2016				
	Women		Men		Total N	Women		Men		Total N
	#	%	#	%		#	%	#	%	
Belongs to natural history or bird-watching club* *	21	12.3	65	7.8	1002	10	18.9	17	8.6	251
Belongs to hunting or fishing organization* *	37	21.5	319	37.9	1014	15	28.3	104	52.8	251
Belongs to environmental organization* *	48	27.6	175	21.2	1001	26	49.1	52	26.4	251
Belongs to community or social service organization	75	43.5	328	39.3	1007	37	69.8	121	61.4	251
Natural resource as livelihood in household	101	57.1	450	52.1	1045	32	45.7	129	48.9	336

*p <5 % - gender significance according to Pearson's Chi-square Test for survey 2016

* p <5 % - gender significance according to Pearson's Chi-square Test for survey 2004

4.3.2.3 Reasons for participating on the committee

Two key reasons provided by the 2016 survey respondents for participating on the committee were to contribute to achieving SFM (49.9%) and because they were concerned about the impact of forestry on the environment (42.3%). Similarly, in the 2004 survey, the chief reasons for participating on the committee were to address concerns about the impact of forestry on the environment (90.2%) and to contribute to planning since the forest is a public resource (86.9%).

The results of the 2004 and 2016 surveys also show that both men and women were equally concerned about the impact of the forest industry on the environment (Table 4-9). Nevertheless, men and women provided significantly different reasons for participating on the committee in the surveys for both years. For example, men were more likely than woman to participate on the committee to preserve their recreational opportunities, while women were more likely to participate as a requirement of their job (see Figure 4-4). Results revealed that women and men were consistent in their reasons for participating on the committee.

Table 4-9. Reasons for participating on the committee

Reasons for participation	Survey 2004					Survey 2016				
	Women		Men		Total N	Women		Men		Total N
	#	%	#	%		#	%	#	%	
Required to attend as part of my job * *	88	50.3	317	37.4	405	25	35.7	40	15.0	66
Want to contribute to planning since the forest is a public resource *	141	81.5	747	87.8	888	8	11.4	46	17.3	54
Ensure that recreational opportunities are not diminished * *	109	65.3	629	74.3	738	6	8.6	57	21.4	64
Concerned about the impact of the forest industry on environment	157	90.2	762	90.1	919	28	40.0	113	42.5	144
Want to learn more about forest management in the area	137	79.2	623	73.9	760	12	17.1	46	17.3	60
Concerned about forest industry jobs in area *	131	75.3	659	77.9	790	6	8.6	52	19.5	58

*p <5 % - gender significance according to Pearson's Chi-square Test for survey 2016

* p <5 % - gender significance according to Fisher's Exact Test for survey 2004

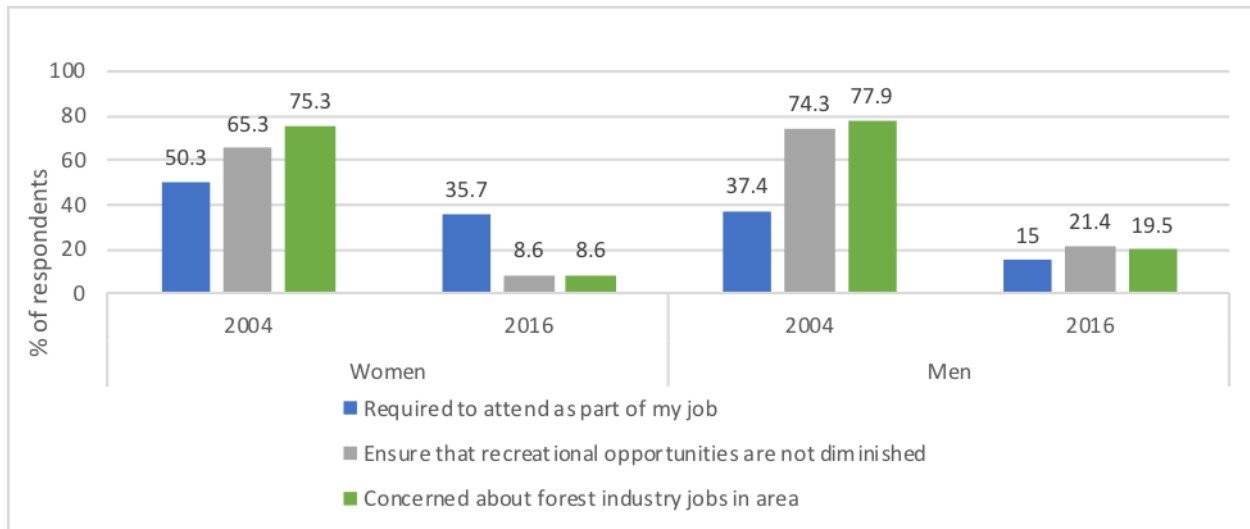


Figure 4-4. Reasons for participating on the committee, by gender

4.3.2.4 Representation of values

In both the 2004 and 2016 surveys, respondents were asked to rate statements about forest values. Respondents were provided with different statements representing four sets of forest values: existence, inherent worth, spiritual, and economic or utilitarian values. The 2016 survey result showed that there was a strong level of agreement (above 95%) with the statements demonstrating the existence values such as “It is important to maintain forests for future generations” and “It is important for me to know that forests exist in my province.” This result is analogous to the findings from the 2004 survey.

As shown in Table 4-10, both women and men rated their values in a similar way. For example, both men and women strongly supported the existence value statement, “It is important to maintain the forests for future generations.” However, there were significant differences in the level of agreement among men and women on statements related to inherent worth, such as “Forests should be left to grow, develop, and succumb to natural forces without being managed by humans,” “Forests should have the right to exist for their own sake, regardless of human concerns and uses,” and spiritual value statements such as “Forests rejuvenate the human spirit,” and “Forests give us a sense of peace and wellbeing.” Further analysis showed that women were more likely to give a higher rating to the value of inherent worth and spiritual value statements than were men (See Figure 4-5).

Similarly, there were significant differences between the responses of men and women to utilitarian value statements. For example, there were significant differences for the statements

“The primary function of forests should be for products and services that are useful to humans” and “If forests are not threatened by human actions, we should use them to add to the quality of human life.” The analysis revealed that men were more likely than women to rate utilitarian value statements highly. This pattern was reproduced across the two surveys.

Overall, these results suggest that men and women hold different forest values: women had stronger support for intrinsic forest values, whereas men favored the utilitarian values of the forest. This difference may affect how committees view plans or practices and, considering the large proportion of male representatives serving on committees, is likely to influence their support for the economic uses of forests.

Table 4-10. Degree of agreement with statements related to the forest values

	Survey 2004			Survey 2016		
	Women Mean	Men Mean	Total N	Women Mean	Men Mean	Total N
Agreement on Forest Values:						
It is important to maintain the forests for future generations	4.93	4.89	1041	4.97	4.95	335
Intrinsic Value Statements:						
Humans should have more respect and admiration for the forests * *	4.54	4.40	1042	4.19	4.47	335
Forests rejuvenate the human spirit * *	4.52	4.35	1035	4.7	4.46	335
Forests should have the right to exist for their own sake, regardless of human concerns and uses * *	3.72	3.47	1027	4.10	3.76	336
Forests should be left to grow, develop, and succumb to natural forces without being managed by humans **	2.51	2.01	1037	2.70	2.19	336
Utilitarian Value Statements:						
Forests can be improved through management by humans *	3.81	4.20	1035	3.93	4.14	336
The primary function of forests should be for products and services that are useful to humans *	2.40	2.85	1038	2.20	2.54	336
Forests should exist mainly to serve human needs *	2.43	2.75	1031	2.26	2.58	335
Forests that are not used for the benefit of humans are a waste of our natural resources *	1.99	2.45	1040	1.84	2.00	335

*p <5 % - gender significance according to T-test for survey 2016

* p <5 % - gender significance according to T-test for survey 2004

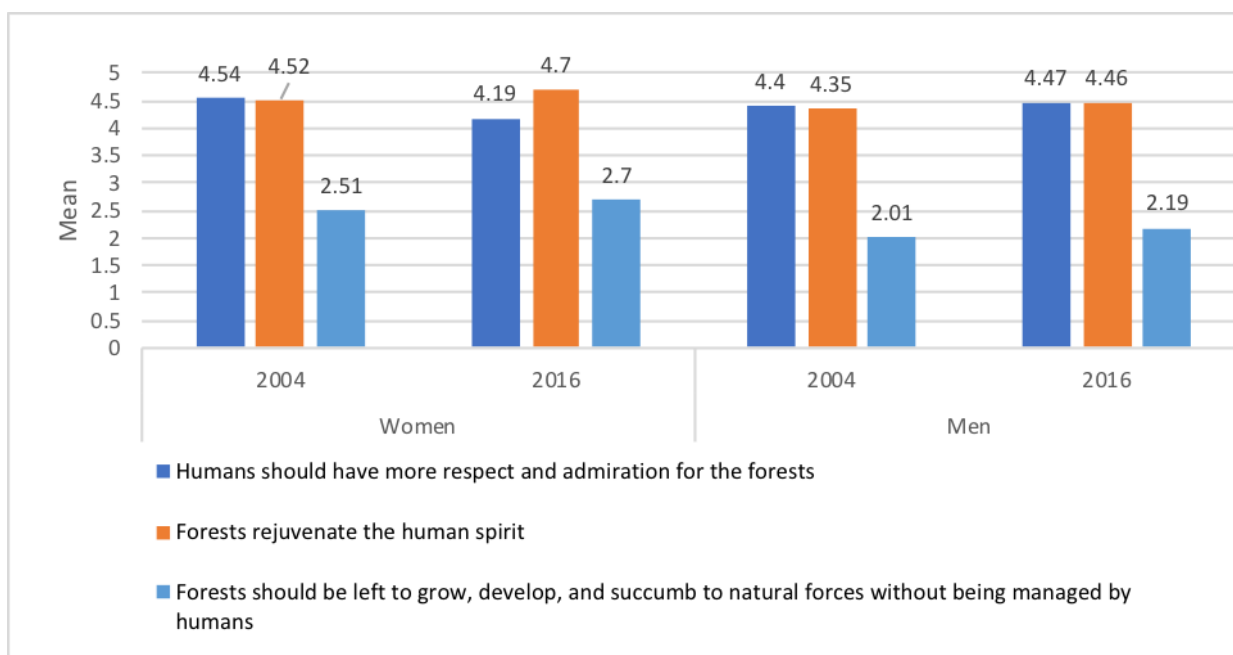


Figure 4-5. Responses to inherent worth and spiritual value statements, by gender

4.3.2.5 Representation of interested groups on the committee

In response to the question of whether the committee represented the values of all interested and affected groups, the majority (74.8%) of those surveyed indicated that the committee represented all the groups affected by forestry operations. As presented in Table 4-11, more men than women were satisfied with the representativeness of their committees. Nonetheless, 25.2% of respondents indicated that some groups were not represented on their committees. Specific gaps identified were representatives from Indigenous groups, environmental organizations, youth/students, and the oil and gas industry. Major reasons cited for their under-representation were that Indigenous people were difficult to retain and that people/organizations were not interested in participating as the commitment was voluntary.

Table 4-11. Does your FAC represent the values of all interested and affected groups?

FAC represents all values *	Survey 2004				Survey 2016			
	Women		Men		Women		Men	
	#	%	#	%	#	%	#	%
Yes	123	68.7	638	77.0	50	71.4	199	74.8
No	56	31.3	191	23.0	20	28.6	67	25.2
Total	179	100.0	829	100.0	70	100	266	100

* p < 5 % - gender significance according to T-test for survey 2004

4.3.3 Process and Deliberation

This section consists of the members' survey results on several aspects of committee process and deliberation. It mainly focuses on the respondents' understanding of the purpose of advisory committees, their opinions on the most influential actors in setting the agenda for committee meetings, factors that influenced how the respondents contributed to committee decisions, and their overall experience and satisfaction with their involvement on the advisory committees.

4.3.3.1 Understanding of the purpose of the committee

In both the 2004 and 2016 surveys, the survey participants were asked whether or not the purpose of the advisory committee was clear to them. The results of both surveys showed that the vast majority of the respondents were clear on the purpose of their FACs (see Table 4-12). However, in the 2016 survey, there was a significant difference between the responses of male and female respondents, indicating that female respondents were less clear than men on the purpose of the committee. Nevertheless, the proportion of female respondents who reported to understand the purpose of the committee was still very high (86%).

Table 4-12. Is the purpose of the committee clear to you?

	Survey 2004				Survey 2016			
	Women		Men		Women		Men	
	#	%	#	%	#	%	#	%
Yes *	153	89.5	743	89.4	60	85.7	250	94.0
No*	18	10.5	88	10.6	10	14.3	16	6.0

*p <5 % - gender significance according to Pearson's Chi-square Test for survey 2016

4.3.3.2 Committee influences

When the participants in the 2016 survey were asked to rate the influence of different actors in setting the agenda for committee meetings, the female respondents rated the industry officials as most highly influential, while the male respondents rated the facilitator as most highly influential followed by industry officials. One of the possible explanations for finding industry officials highly influential was that most of the FACs surveyed were sponsored by forest industries. The differences between the responses of men and women are highlighted in Table 4-13. There were some significant differences in responses between men and women. For example, there were significant differences for the chairperson and sponsor of the committee. The results

showed that women considered both the chairperson and committee sponsor more influential than other actors (See Figure 4-6). Both men and women respondents found the facilitator highly influential in FACs where professional facilitators were assigned to run the meetings.

Table 4-13. Influence in setting the agenda for committee meeting

Who is most influential in setting FACs' agenda?	Survey 2004				Survey 2016		Total N
	Women		Men		Women	Men	
	#	%	#	%	Mean	Mean	
Industry officials	48	28.4	205	24.6	3.96	3.86	336
Chairperson*	--	--	--	--	3.94	3.57	335
The participants themselves *	45	26.6	288	34.5	3.39	3.30	335
The facilitator	26	15.4	134	16.1	3.83	3.92	335
Provincial government officials	24	14.2	134	16.1	3.40	3.36	335
More than one view	17	10.1	37	4.4	--	--	--
Other	9	5.3	36	4.3	4.86	4.88	218

*p <5 % - gender significance according to T-test for survey 2016

* p <5 % - gender significance according to T -test for survey 2004

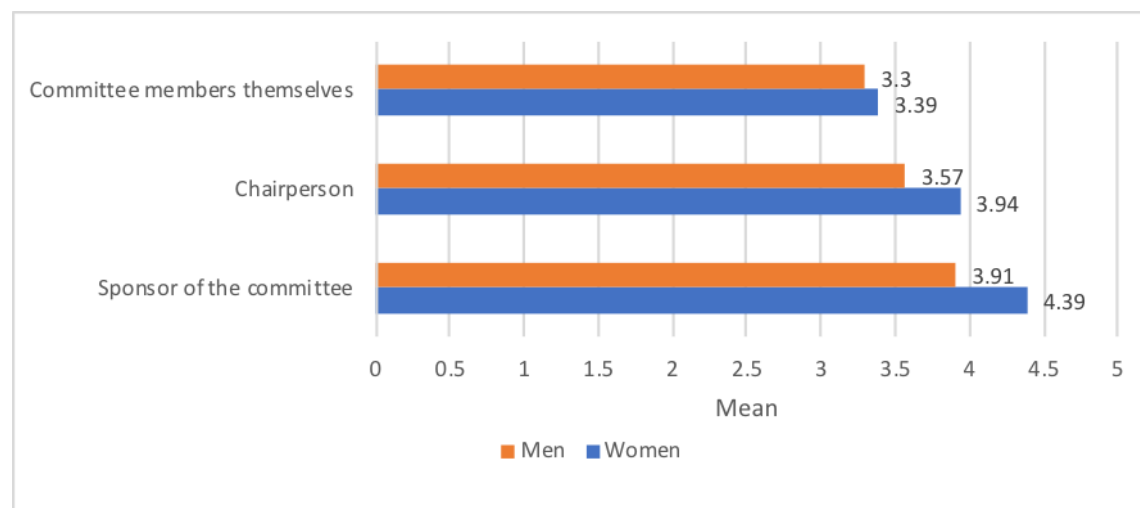


Figure 4-6. Ratings of the influence of different actors in setting the agenda (Survey, 2016)

In both the 2004 and 2016 surveys, participants were asked to rate different factors that might have pressured them to agree with committee decisions during the consensus-building process. As shown in Table 4-14, for both years, the highly-rated factor of pressure was found to be 'the complexity of the issue' for both male and female respondents. Comparing the 2004 and 2016 survey results, it was found that women reported more pressure than men for factors such as 'time constraints,' 'group pressure,' and 'the complexity of the issue' (see Figure 4-7).

Furthermore, in the 2016, there was a significant difference between the responses of men and women for the factor ‘group pressure.’

Table 4-14. Frequency of factors that pressured respondents to agree with committee decisions

How frequently do you feel pressured to agree with committee decisions, due to the following factors	Survey 2004				Survey 2016			
	Women		Men		Women		Men	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Time constraints	2.24	1.40	2.12	1.22	2.68	1.65	2.34	1.61
A lack of information	2.25	1.36	2.26	1.15	2.60	1.57	2.37	1.29
Group pressure *	1.99	1.34	1.80	1.14	2.38	1.53	1.98	1.17
Outside pressure	1.72	1.33	1.73	1.13	2.34	1.61	1.99	1.23
The complexity of the issue	2.55	1.36	2.40	1.16	2.97	1.54	2.58	1.18
Some other constraint, please specify:	3.29	2.07	3.70	2.02	4.62	1.88	4.36	2.01

Reported means of the scale, from 1 (Never) to 5 (Always)

*p <5 % - gender significance according to T-test for survey 2016

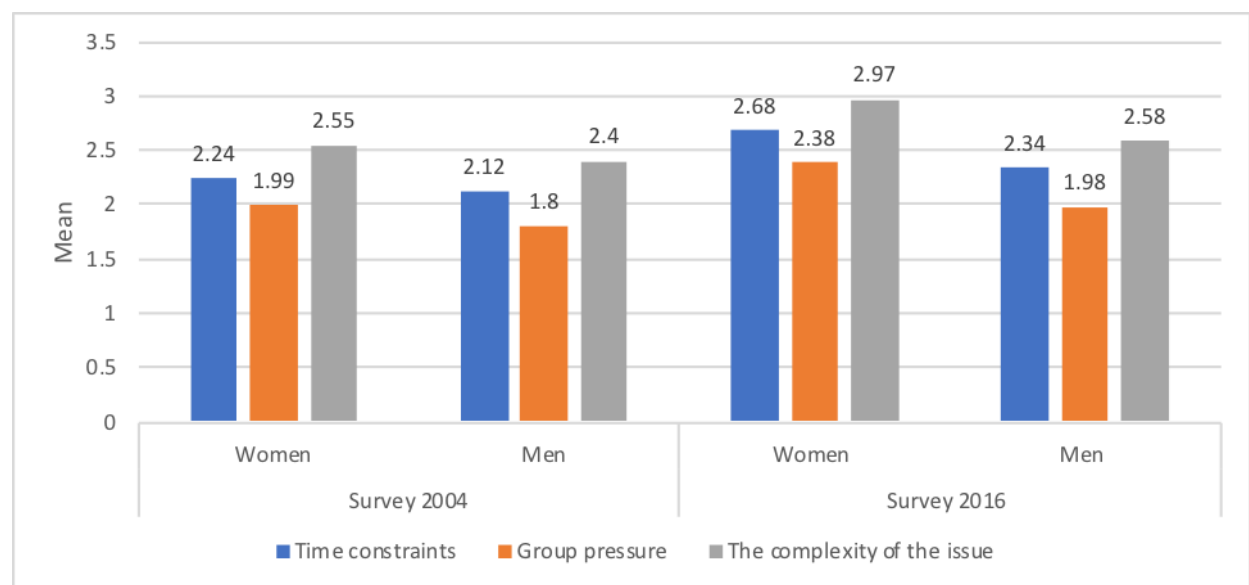


Figure 4-7. Frequency of factors that pressured respondents to agree with committee decisions

4.3.3.3 Experiences of working on the committee

To analyze the members’ experiences with committee processes and deliberation, the 2016 survey participants were asked to rate their level of agreement with different aspects of the committee’s activities. Women and men rated their experiences similarly (see Table 4-15).

Nonetheless, the results showed that women were slightly less likely than men to report being able ‘to influence the decisions that are made by the committee’ and being ‘given adequate opportunity to voice [their] concerns within the committee.’ However, these results were not statistically significant. Similarly, women were slightly more likely than men to report that ‘time is poorly spent.’

4.3.3.4 Satisfaction with the committee’s work

In the 2016 survey, respondents were asked to rate their level of satisfaction on several statements representing different aspects of the committee’s work. The differences between the responses of men and women are highlighted in Figure 4-8. The results show that the overall levels of satisfaction were relatively high; however, men were more likely to be satisfied than women with all the aspects of committee’s work. There were some significant differences on responses between men and women, for example, in their responses to these statements: ‘the quality of discussion within the board’ and ‘the quality of information provided for board discussion,’ with the women less likely to be satisfied with both. However, the level of satisfaction increased slightly for both men and women across the years.

Table 4-15. Reports of experiences

	Survey 2004				Survey 2016			
	Women		Men		Women		Men	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
The process is fair	3.78	1.185	3.88	1.012	3.99	1.091	3.97	.963
Time is poorly spent in the process *	2.85	1.204	2.53	1.375	2.51	1.158	2.39	1.129
I am able to influence the decisions that are made by the committee	3.62	1.16	3.68	1.04	3.61	1.215	3.66	.890
I have been given adequate opportunity to voice my concerns within the committee	4.25	1.034	4.32	0.813	4.22	.820	4.24	.839

Reported means of the scale, from 1 (totally disagree) to 5 (totally agree)

* p <5 % - gender significance according to T-test for survey 2004

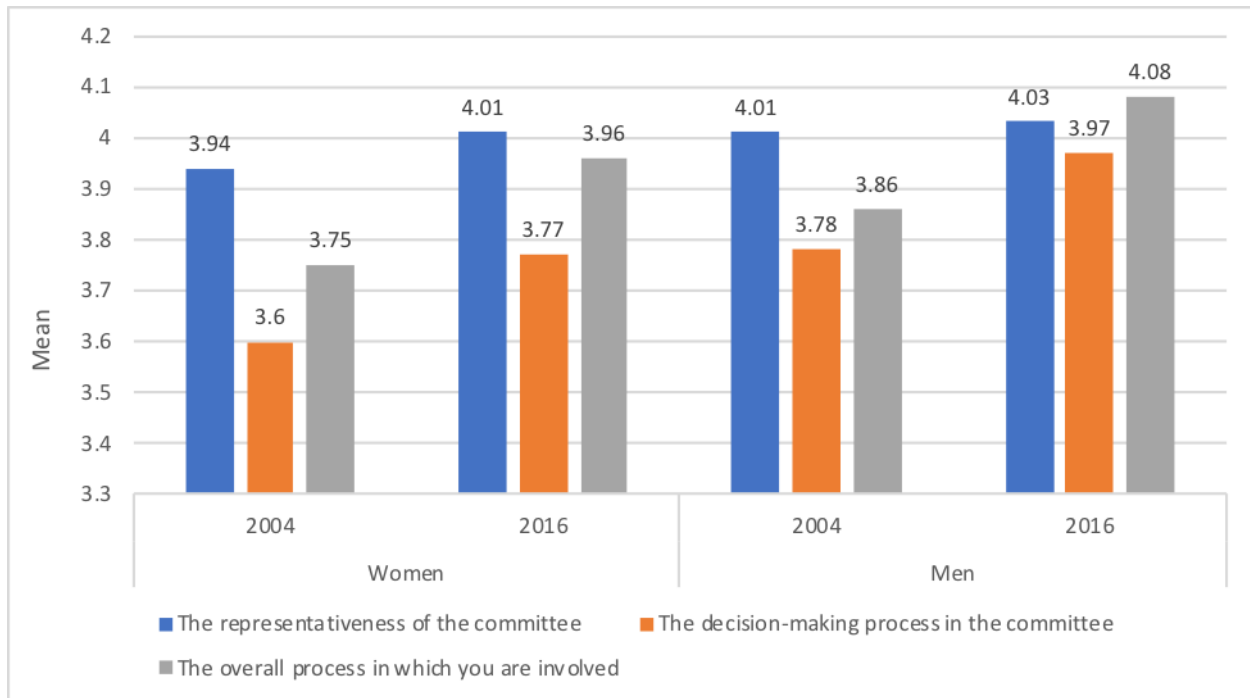


Figure 4-8. Satisfaction with the committee's work, by gender

4.3.4 Effectiveness of the Committee

In both the 2004 and 2016 surveys, the participants were asked to share their views on the effectiveness of the FACs, as well as measures that could improve the effectiveness of the committees. Both the survey results revealed that the majority of the respondents believed that the effectiveness of the committees could be improved (see Table 4-16). Interestingly, in both the surveys, a higher proportion of women than men suggested there was room for improvement.

Table 4-16. Can anything be done to improve the effectiveness of the committee?

	Survey 2004				Survey 2016			
	Women		Men		Women		Men	
	#	%	#	%	#	%	#	%
Yes	100	63.3	416	54.8	44	63.8	145	54.9
No	58	36.7	343	45.2	25	36.2	119	45.1

4.4 Summary

This section has compared the results of the 2016 survey of committee members with the results of the 2004 survey, demonstrating that the FACs have remained fairly consistent over the past 12 years. For example, the 2016 findings on the demographic characteristics of the committee members, the forest values the members hold, the organizations they represent, and

the status of women and Indigenous people in the group are comparable with the 2004 findings. However, a few changes were observed in the results for the two years. For example, the membership of FACs was older in 2016, with the average age of respondents increasing from 50.1 years in 2004 to 57.6 in 2016; as well, the level of satisfaction also increased, although only slightly. Table 4-17 shows a 12-year flashback based on members' survey results.

In 2016, the FACs were still highly male-dominated, with poor representation of women on the committees. The results from both the 2004 and 2016 surveys showed significant differences between women and men in their reasons for participating on the committee, the organizations to which they belonged, the forest values they held, the stakeholders they considered the most influential in the setting meeting agendas, and their level of satisfaction with aspects of the committee's work. In both the surveys, women were more likely to say they participated in the committee because they were required to do so as part of their job, while men participated to preserve their recreational opportunities. Both the surveys revealed that women were more likely to belong to environmental organizations and men to hunting and fishing organizations. In the 2016 survey, women continued to privilege intrinsic value statements and men utilitarian value statements. Although the level of satisfaction increased was higher in 2016 than it was in 2004 for both men and women, in both surveys, men were more likely to be satisfied with several aspects of the committee's work.

To better understand why women and men provided the responses they did, a set of follow-up interviews was conducted with representatives of three committees considered to be gender-balanced (30%-50% men and women) and five committees considered to be gender-imbalanced (less than 30% women and men). These interviews provided more in-depth understanding of committee members' experiences, especially about how women and men describe representation, values, and satisfaction. Additionally, interviews helped to explore constraints for women's participation in FACs and incentives to encourage women's effective participation in committee meetings and decision-making processes. The details of the interview results are explained in the next chapter.

Table 4-17. A 12-year Flashback (from members' survey results)

	2004	2016
	<u>Demographic characteristics</u>	<u>Demographic characteristics</u>
	<u>% of respondents</u>	<u>% of respondents</u>
	ON-23.3%	ON-31%
	Prairies-7.2%	Prairies-10%
	AB-11.9%	AB-14%
	BC-7.1%	BC-20%
	% of women respondents-18.7%	% of women respondents-20.7%
	Average age of respondents-50.1 years	Average age of respondents-57.6 years
	Self-identified as Indigenous- 7.2%	Self-identified as Indigenous- 9.0%
	Understanding of committee purpose 87.4%	Understanding of committee purpose 99.2%
	<u>Views represented by respondents</u>	<u>Views represented by respondents</u>
	Public at large-7.1%	Public at large-21.2 %
	My own-7.1%	My own-19.8%
	Forest Industry-16.7%	Forest Industry-17.2%
	Recreational group-9.9%	Recreational group- 16.3%
	If FAC represent values of all interested parties? Yes- 60%	If FAC represent values of all interested parties? Yes- 74.8%
	<u>Satisfaction</u>	<u>Satisfaction</u>
	The levels of satisfaction were relatively high where men were more likely to be satisfied than women	Overall the level of satisfaction has increased slightly for both men and women and men continued to be more satisfied than women
	<u>Reasons for participation</u>	
	Women were more likely to participate on the committee as they were required to attend as part of their job whereas, men more likely to participate to ensure that recreational opportunities were not diminished for both years	
	<u>Representation of values</u>	
	Women had stronger support for intrinsic values whereas, men favored the utilitarian values of forest for both years	
	<u>If FACs effectiveness could be improved? 56.5% of respondents in 2004 and 56.3% of respondents in 2016 have suggestions for the improvement</u>	
	<u>Response rate- 47.8%</u>	<u>Response rate -30.7 %</u>
	<u>Demographic characteristics</u>	<u>Demographic characteristics</u>
	<u>% of respondents from</u>	<u>% of respondents from</u>
	QB-37.8%	QB-15%
	Resource industry or agency dependent household-54.1%	Resource industry or agency dependent household-47.2%

CHAPTER 5

INTERVIEW ANALYSIS

5.1 Overview

Following the 2016 survey, interviews were conducted to gain a more in-depth understanding of how men and women participate in forestry advisory committees across Canada. A semi-structured interview guide was designed as a probe to learn more about the personal experiences of participants, especially around gender-based differences in interpretations of certain aspects of the committee's structure, process and deliberations, and effectiveness. As mentioned in the methods chapter, the interviewees were selected based on the composition of their FACs (number of men and women as full members). Twenty-eight interviews were done with individuals representing both gender-balanced and unbalanced FACs. This chapter mainly presents the results relating to two of the research objectives: to explore the nominal and effective participation of women and men in public advisory committees, and to determine incentives and obstacles for creating diverse and effective public advisory committees. The chapter focuses on the status, obstacles, and opportunities that women have on FACs, as well as their participation in decision-making, based on the interviewees' personal experiences of participating on the committee.

5.2 Demographic Characteristics of Interviewees and their FACs

For the interview, three gender-balanced FACs (one located in Alberta and two located in British Columbia) and three gender-unbalanced FACs (one located in New Brunswick and two located in British Columbia) were selected among the FACs that participated in the survey. As mentioned in Chapter 3, for this study I considered ratios of 40/60 as well as 50/50 to be gender-balanced. Additionally, two participants (from FACs located in Ontario) were selected for an interview based on their responses to the questionnaire survey. Of the 28 interviewees, 19 were men (67.9%) and nine were women (32.1%). Women were deliberately oversampled as only 20.7% of national survey respondents were female. There were six women from balanced FACs and three women from unbalanced FACs.

5.3 Participation on the Committee

Of the total interviewees, the majority were members (n=21, %=75), and the rest were chairpersons (n=4, %=14) and facilitators (n=3, %=11), respectively. Female interviewees stated that they represented the conservation sector, farming and ranching, public interest, forest licensee, and government agencies. Interestingly, three women respondents from unbalanced FAC claimed to hold vital roles on their committees, such as chairperson, government representative, or advisor to a forest licensee. The men represented hunting and fishing associations, outfitters, forestry workers and contractors, recreation sectors, small business, education, and a forest-dependent community.

The number of years that the interviewees were associated with FACs varied regardless of their gender and type of FACs they belonged to (balanced and unbalanced). Women served on the committees from three to 26 years and, similarly, men served from two to 25 years. However, the majority of men (66.7%) from the unbalanced FACs were more likely to serve on the committees longer (more than 10 years) than the men from balanced FACs and women from both balanced and unbalanced FACs.

5.3.1 Meeting Expectations

Interviewees were asked if their expectations were met by participating on the committees. The majority of the respondents (67.9%) agreed that they had accomplished their objectives as members of the committees. More than half (56.3%) of the respondents from balanced committees and 83.33% from unbalanced committees responded positively to meeting their objectives by participating on the committee. The responses of men and women respondents are shown in Figure 5-1. The results suggest that more than half of the male and female interviewees (68.42% of men and 66.7% of women) had positive committee experiences.

All three female respondents from the unbalanced committee reported that their expectations had been met, while two female respondents (of six) from the balanced committee suggested that their expectations had not been met. One female respondent replied as follows:

My expectations are to slow the logging and make sure that there's a little, at least some sciences involved in decisions that are being made. And I don't believe the rate of log or forest development, as they call it, is sustainable. And, of course, it's not sustainable

since there was this vast pine die-off from the beetles.” (Respondent # 10, Female from Balanced FAC).

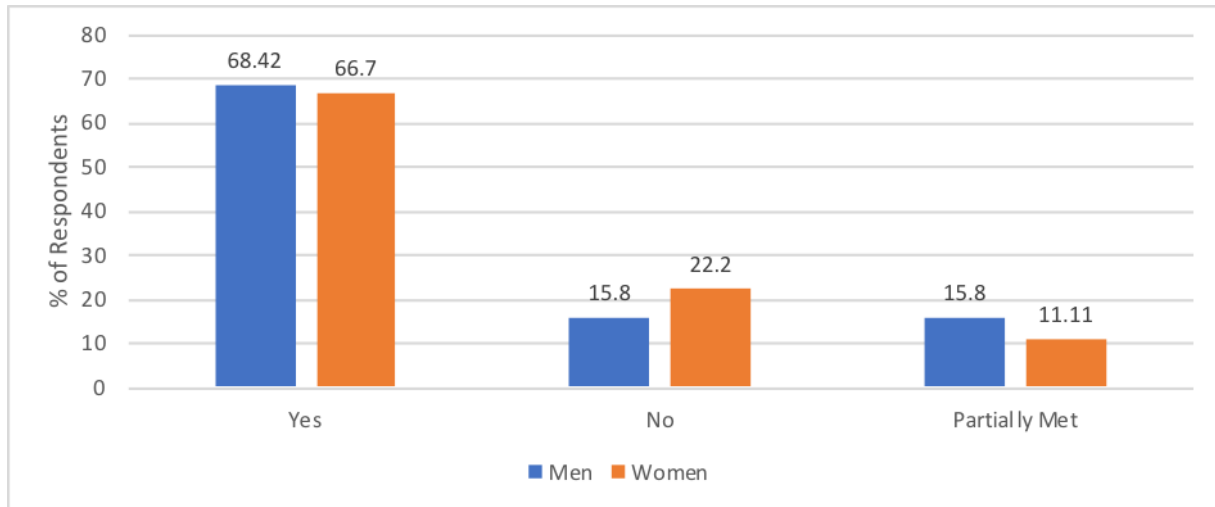


Figure 5-1. The committee met participants' expectations (N=28, Male=19 and Female=9)

A response from a male interviewee was more optimistic:

I have a free voice. Anytime I can choose to speak on any issue that comes up based on our conducts or rules of our conducts. So, I'm very pleased how this company and people that sit on the committee are. We represent the wide range of people and they listen to us. (Respondent # 17, Male from Un-balanced FAC).

Additionally, 25% of the respondents associated with balanced committees described their expectations as being partially met. One female respondent responded that it would be better if the committee were given more decision-making power:

My expectations have been partially met. A lot of it is downloading the information and it would be nice if the process allowed more opportunity to make recommendations (Respondent # 20, Female from Balanced FAC).

One discontented male respondent from an unbalanced committee described reasons for his dissatisfaction about how the committee works:

Firstly, I would say is a lack of willingness. The company that is responsible for organizing the committee does not want the input from the public. The company is

required by the government policy to have a committee and by its certification requirements to have a committee. So, as long as there is a committee then that has fulfilled their need of the committee, they don't want to have a public, they really don't want to have its input. Secondly administrative management of the committee, as a consultation process is very poor. If you look at the any of the good literature, any of the guides on how to make participatory process functional, none of the usual recommendations and guidelines are used in this committee. They do none of the things that people say you should do and they do a lot of the things that the people say you should not do. Third element that contributes to that odd situation is a lack of any policy or guidelines from the government in terms of public participation. (Respondent # 11, Male from Un-balanced FAC)

5.3.2 Significant Changes in Committee Operation

When interviewees were asked to describe significant changes in committee operation (since they started serving on the committee), more than half (53.6%) of the respondents stated that they have observed some changes in the committee's work and structure. Major changes described by the respondents were related to membership and also to the scope of the committee's work, which, as described by these two respondents, had diminished:

A committee in its earlier form started in about 1992 and at that time it was called a "management task force." It actually had a very active role in the province originally. It was a decision-making organization and the Province of Alberta was actively supporting the participating in around the forestry decisions within Alberta Pacific Forest Industry Forest Management Agreement area and so it was quite active and quite influential. And that forest management task force continued more or less in that role until about the year 2000. Although it carried the same name in the 2000, it became more of an advisory committee. And in consultation with the Alberta government, forestry representatives of the Alberta governments, the direction was provided to Alberta Pacific Forest Industries to emphasize the advisory role of the group rather than a decision -making role and that happened in 2009 or 10. So it has been operating as an advisory committee I mean officially as an advisory committee since then so working directly with the company and its role with the province has changed. (Respondent # 24, Male from Balanced FAC)

In comparison to where [the company name] are today, they have changed their operating methods and the government have changed their forest planning system considerably. So, from the original way of operating to where we are today there is a big difference. I don't think the company has utilized us in the best way. It has gone to more and more of just information sharing to us, the public, what they are doing. And they could utilize us better if they would have changed the focus into seeking advice and using us to form their opinion on how they operate. (Respondent # 26, Male from Balanced FAC)

An example of a response that indicated the committees had not changed much was as follows:

I think we continued operating more or less the same way and we kind of operate on a consensus model. Many of the members have been members for a substantial amount of time. Several members including myself have been here from day one. (Respondent # 5, Male from Unbalanced FAC)

Additionally, a respondent suggested that although there were no significant changes observed, discussion and deliberations became easier the longer the participant was on the committee. When asked if there had been any significant changes, one respondent answered in this way:

Not really! And I mean the only change would be that I think everyone has gotten used to board and we are comfortable with each other and we feel free to speak, free to ask questions, free to disagree and move on sort of things (Respondent # 14, Female from Un-balanced FAC)

5.4 Representation of Men and Women on the Committee

The next section of the interview was concerned with the representation of men and women on FACs. Less than half of the respondents (46.4%) stated that their FACs were gender-balanced, when the proportion of respondents associated with balanced FACs was 57.1%.

Moreover, two of the respondents (from each gender) representing unbalanced FACs also described their FACs as gender-balanced. Two respondents explained their reasoning:

Because we have both male and female representatives from stakeholders. So, yeah, it's fairly well balanced. There are not as many stakeholders. Like not as many as First Nations or stakeholders groups like recreation or tourism or whatever, but there is a few of us ladies anyways. (Respondent # 14, Female from Unbalanced FAC)

I would say they are well represented. I was recruited to the committee by a woman and there's a number of women who have significant roles in the committee. I suppose there are more men than women who sit around the table, but I think everyone's opinion is respected equally and because (name of chairperson) is more or less chair of our community, she does tend to lead the committee in that sense. There are a significant number of women, and I feel that the women and men voices are respected equally. (Respondent # 27, Male from Unbalanced FAC)

About half of the interviewees (46.4%) suggested their FACs were gender-unbalanced from a composition and professional standpoint. Two of the interviewees replied this way:

I feel it's not gender balanced from a professional standpoint. No. Representation from different organizations in different interest groups, besides the aboriginal components, there's not a lot of women. I would actually say, with the aboriginal component, it is maybe 30 to 40 percent (Respondent # 16, Female from Balanced FAC).

No! It's been an issue right from the get go that for the most part the committee is made up of well, generally, white Anglo-Saxon middle-aged males. That's who basically submitted their names when the committee was first formed. We have always been concerned about trying to get more females on the committee, so that we can have a good mix of males and females and we have had women in the committee from time to time. Unfortunately, many of them haven't stayed (Respondent # 5, Male from Unbalanced FAC)

Additionally, two of the male respondents from unbalanced FACs did not perceive gender issues as important, as indicated by this response:

I think our values are all represented. I don't think that it has anything baring on men and women. I think it's to do with the tenure, the forest tenure that they have and how it's administered and the different values that are represented in our community. I don't think men and women have anything to do with it. I think we're balanced by giving everybody equal opportunity to speak up on any issue they want...it's not something I can change or do or look for anything that we want participation by women... it's whoever wants to come and I don't think we solicit and go out to choose more women. They would need to have an interest in what forestry is. That would be the first thing, wouldn't it? Why would you want to be there if you are not interested? (Respondent # 17, Male from Unbalanced FAC)

5.4.1 How did Balanced FACs Achieve Gender-Balance?

The interviewees who viewed their FACs as gender-balanced were asked to describe how they were able to have fairly equal representation of men and women on their committees. The majority of the respondents (84.6%) described that there were no efforts taken to balance the gender proportion on the committees. It just worked out that way, as two of the respondents explained:

I don't think that there was conscious effort to “we need more men or more women.” I think it is probably a good broader recognition. People recognizing the values of having a balanced gender membership and I think it is something becoming more and more the norm. These types of committees are a little better balanced than they were in the past. There's an advantage to that especially when you have groups representing communities. The communities are obviously in common cases 50-50 percent male and female. So, it's only right that representatives should be fairly balanced as well. (Respondent # 3, Male from balanced FAC)

Purely by the fact that there are so many men and women involved in forestry today” (Respondent # 6, Female from balanced FAC)

5.4.2 Reasons Given for Underrepresentation of Women on Unbalanced FACs

The interviewees who described their FACs as unbalanced were asked if they could explain reasons for the poor representation of women on their committee. The key reasons described by the respondents constraining women's participation on FACs were as follows: the male-domination of working environments in the forest management sector, and the traditional role of a woman as a primary caretaker at home.

Nine of the interviewees suggested that highly male-dominated working environments in forestry-related organizations discouraged women's involvement in FACs. Here are two examples of responses:

The biggest problem is that the committee members, the people they represent it's probably I would say 98% men, so there's not very many women in these communities and each association (Respondent# 1, Male from Unbalanced FAC)

I think because of the types of the organization that they have. They have hunters and trappers, different forestry companies, and different industries that they have outside of the aboriginal component, are a very male dominated profession. (Respondent# 16, Female from Balanced FAC)

Two female respondents provided possible explanations for the poor representation of women on FACs, suggesting that women were not interested because they have social and family obligations to fulfill. Their responses were as follows:

I think there're a lot of women who are not interested. And I feel a lot of them just don't have enough time. That's all. It could be very time consuming (Respondent # 4, Female from Balanced FAC)

Most of the members of public advisory groups are probably seniors. And senior women don't always see forestry as a place to, you know, put their voluntary time. I think as time goes on we will see more women. We have had younger women come and go, but family obligations and work obligations really interfere with the ability of younger women to participate". (Respondent# 19, Female from Unbalanced FAC)

Another reason highlighted by an interviewee was the low turnover of committee members.

Committee is by invitation and 11 years I've been in this committee. Most of the participants are the same. They are same people who are still sitting there for the 11 years. (Respondent# 11, Male from Unbalanced FAC)

One of the respondents suggested that since the FAC does not make any decisions, it does not matter whether there are men or women representatives. He explained his reasoning this way:

Because the committee has no decision-making power. Committee is composed of men who are representatives of the association that are dominated by the men. I think this is a fairly conservative area. I think most of the men who are participating on the committee if you'd ask them that question, would sort of say "What is the need to have a woman in the committee?" (Respondent# 11, Male from Unbalanced FAC)

5.4.3 Effects of Under-Representation of Women on the Types of Decisions/Recommendations Made by the Committee (for Unbalanced FAC)

The majority of interviewees (76.9%) associated with gender-unbalanced FACs suggested that the poor representation of women on the committees did not affect the types of decisions made. Only two of 12 interviewees associated with unbalanced FACs expressed that since men and women have different perspectives, the poor representation of women impact the types of decisions or recommendations made by the committees:

Well, men have their own ideas on how things should be done and we have our own ideas on how things should be done. And if you don't have any women representation, you're outnumbered. Even though everything is by consensus, you're still outnumbered (Respondent# 4, Female from Balanced FAC)

I think it's probably the same as in politics. It's more a revenue-focused emphasis in the operation of the committee without as much focus on the practical needs of the environment and other concerns, other than strictly money and revenue based (Respondent# 25, Male from Unbalanced FAC)

The respondents who stated that a lower representation of women on the committees did not affect the types of decisions made emphasized the equal treatment of members regardless of their gender. Two of the respondents replied this way:

I really don't think it has any bearing on the decisions! I know based on my experience; everybody on that public advisory group is listened to with equal treatment, no matter what their sex.” (Respondent# 9, Male from Balanced FAC)

I don't believe that has significant effect. No, I don't think it makes a difference (Respondent# 19, Female from Unbalanced FAC)

One of the respondents indicated that since the committee was basically an information sharing forum rather than a decision-making body, he believed that it did not matter how many men or women were present on the committee:

Well, there are no decisions that are made by the committee. Very rarely, may be once every two years, the committee might make a recommendation on something but, typically non-substantive and certainly no decisions. The committee exists as an information forum. No substantive decisions are made by the committee so does not matter whether there are women and men because it is not going to change anything. The company uses the committee to provide information to the different associations that are represented and they have the opportunity to ask the questions of the company (Respondent# 11, Male from Unbalanced FAC)

5.4.4 Obstacles for Women to Participate on the Committee

All the interviewees were asked if there were any obstacles that have prevented women from participating on the committee. The responses to this question are shown in Figure 5-2. Less than one-third (28.6%), of which 66.7% were women and 10.5% were men, stated that there were some obstacles that hindered women’s participation on the committee. The obstacles described were similar to the reasons provided for under-representation of women on the committee.

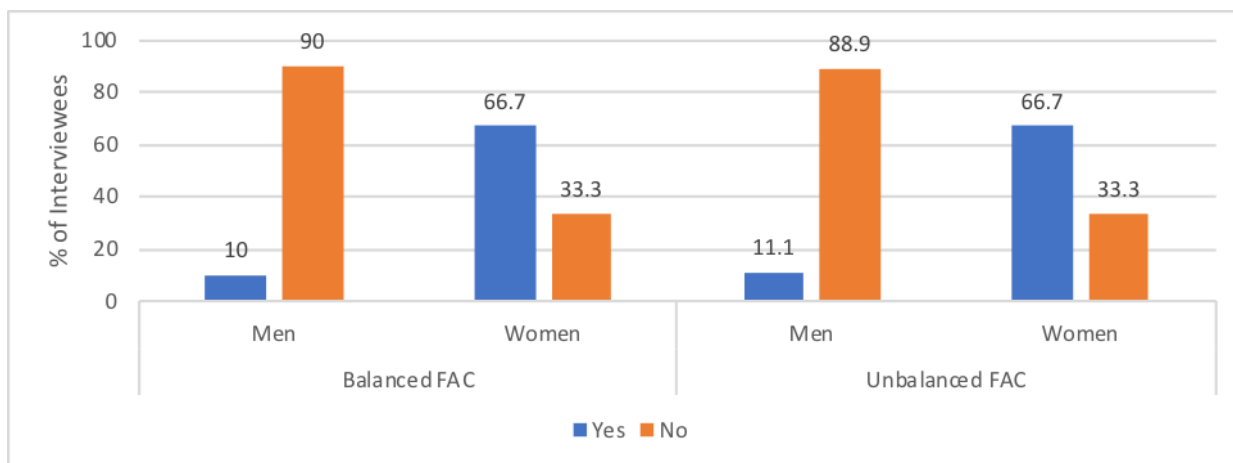


Figure 5-2. Are there obstacles for women to participate on the committee?

Two female respondents suggested evening meetings and the role of a woman as primary caretakers at home as possible difficulties for participating on the committees:

I think one of the biggest obstacles for participating is that women are still primarily in charge of their households and kids at the end of the day. So, to leave the family for four five hours every couple of months to go participating in meetings, I think there's a barrier with childcare especially if you are a single parent. In these years, guys can get away. They are not expected to worry about stuff like that. (Respondent# 15, Female from Unbalanced FAC)

The barrier that I could see is evening meetings and family responsibilities of women with children. But, I think that men participating have the same challenge. So, I think that there's a bias to the people participating who have a young family. There are a lot of older people represented on the public advisory group and I think that's because we've more free time in the evening. (Respondent# 20, Female from Balanced FAC)

Two interviewees maintained that the lack of women's involvement in forestry-related organizations was one of the obstacles for their representation on FACs:

It's much bigger broader kind a question of society probably. And for example: trappers and guides, I don't think there are a lot of females that are currently involved on that industry. So, that's an obstacle. (Respondent# 20, Female from Balanced FAC)

That is not a really a committee issue because they are representative of a company or government etc. It is if there are more women coming into the government. For example, there would be more women in the committee. So, we are the consequence of the other employment opportunities. (Respondent# 26, Male from Balanced FAC)

About 71.4 % of respondents indicated that there were not any obstacles for women to participate on the committee. Two respondents put it like this:

I'm not aware of any restrictions or any hindrance that would stop a woman from being welcomed in our committee. I think that all that they would have to do is show an interest in and they would be welcomed. (Respondent# 7, Male from Unbalanced FAC)

No, there are no barriers to it. Folks that are appointed happen to be men or women and they show up to the meetings, they actively participate. And obviously, it wouldn't matter if they are men or women. They are welcomed to the meetings for their ability and to contribute from the perspectives that they bring. I'm not aware of any restrictions or any hindrance that would stop a woman from being welcomed in our committee. I think that it's all what they would have to do is show an interest in and they would be welcomed. (Respondent#24, Male from Balanced FAC)

5.4.5 Strategies to Overcome the Obstacles

The interviewees were asked to suggest some strategies that could help to overcome the obstacles for women's participation. Some suggestions were as follows: during recruitment regularly ask potential women representatives from associated organizations to join, widening the scope of the FACs' interest area so that more women might become involved, organizing an open house to make women aware of the committee, and promoting the fact that there were other women involved on the FACs to attract more women during recruitment.

A number of interviewees suggested that requesting women to join the committee during recruitment would be a good strategy to improve women's representation. The female respondents also recommended looking for women who were interested in joining FACs by advertising more broadly and organizing open houses:

Maybe constantly putting the request out there to try to think of women who are more active or more vocal and like who want to participate. (Respondent# 14, Female from Unbalanced FAC)

I think you've got to reach out perhaps to a broader organizational or professional faith. (Respondent# 16, Female from Balanced FAC)

The worst thing of all is there's not a lot of people who know about these things. I think open houses are a bigger word out to the public about what we were trying to do and everything like that. You set up in the mall or something, then you get women coming around and they look at some of the stuff and they go "Oh, I'm interested in water quality" or "Maybe I should do something", or "Maybe I can come and join," or something like that. I think that would work. (Respondent# 4, Female from Balanced FAC)

Similarly, male respondents also emphasized looking for women participants during the new recruitment by the committee. One male responded put it this way:

The committee could ask at the committee meeting if the difference in quantitative representation of male and female could be addressed, discussed by the members and committee members could be asked to speak to their constituent about having a woman within their constituency to represent the committee. And it could be stated right up front we don't have, you know, a 50-50 split in representation of male-female, that's what we would like to have that. (Respondent# 28, Male from Unbalanced FAC)

One of the female respondents explained that it was difficult for them to get people to participate in the committee from different sectors in the first place, so they were not in a position to aim for a gender-balanced FAC yet:

To be honest, I don't think anybody has really thought about female representation on the board, so it's just trying to get members in the first place that represent the different sectors, not that we are going to start targeting, to get even representation of men and women. I think our biggest challenge over last couple of years has been getting people to

participate. So at this point we still kind of, whoever is willing to participate that's great (Respondent# 15, Female from Unbalanced FAC)

One male respondent confirmed the statement of Respondent 15 above by indicating that, even if FACs' asked women to join from the associated organizations, they would not be in a position to send female representatives as many of the member institutions were male-dominated. He further explained that as the committee basically was just a platform for information sharing, it did not matter whether there were men or women present around the table:

If you wanted to increase women's participation on the committee, in fact organizers would need to say to the association, "We would really like to have women coming as your representative." But these associations would not be in a position to provide a woman coming in or they would have to look at other organizations, other institutions that would be more likely to have some women memberships and be more likely to be able to send woman as a representative. But, as the company, as like a province, see the committee mainly as a way of just giving information to people who want that information, then there's no real need. Why would you be concerned if there were women or not but, I think it's part of the attitude of the company. Just why would you bother? What is the need to have a woman around the committee?" (Respondent# 11, Male from Unbalanced FAC)

5.4.6 Consequences of Increasing Women's Representation

When the interviewees were asked to explain the consequences of increasing women's representation on the committee, almost all interviewees reported that the committees would be inclusive, and more focus would be on sustainable forest management practices as women tend to think a little differently than men. Two of the respondents replied like this:

I would hopefully believe that one consequence would be there would be more balanced view of forest resources and sustainable harvesting, if there were greater women's participation. I believe that the values that are inherent in our forest wouldn't be focused solely on timber products. And it would be more focused on all benefits of the forest. (Respondent# 25, Male from Unbalanced FAC)

I think you would see a lot different practices put into effect because we are more conscious of the environment, we're conscious of the water, we're more conscious about lot of things... We see things in totally a different light. (Respondent# 4, Female from Balanced FAC)

5.4.7 Would More or Fewer Women on the Committee Lead to Different Outcomes?

All the interviewees were asked if having more or fewer women on the committee would lead to different outcomes. Even though almost all the respondents believed that women have better perspectives than men on sustainable forest management, only seven of 28 respondents (25 %) agreed that the number of women present could influence the outcomes. They suggested that having more women on the committee would lead to more balanced or well-rounded and better decisions regarding the use of forest resources. A respondent expressed it this way:

I would hope it would lead to less focus on financial benefits of wood products and more focus on tourism, wild life, biodiversity, all the other aspects that need more focus in sustainable forest management. (Respondent# 25, Male from Unbalanced FAC)

More than two-thirds of respondents (male: n=13, %=68 and female: n=6, %=67) reported that, in their view, more or fewer women on the committee would not lead to different outcomes. According to the interviewees, since members provide the perspectives of the organizations they represent and decisions are made by consensus, the number of women on the committee has no impact on outcomes. Two made these points:

I don't believe so. The reason I say that is its forestry based, and I think all the people who participate bring perspective on forest management. And I think the values that are brought forward by the people who are participating within the various communities are kind of fundamental to their communities they know and they express them (Respondent# 24, Male from Balanced FAC)

I don't think so. We all get along reasonably well and we all talk out ideas, talk out problems, and offering up suggestions. There might be some slight differences but as per

the board functioning, I think we'd all still be talking things through and coming to a decision. I don't think it would be terribly different. (Respondent# 14, Female from Unbalanced FAC)

One respondent maintained that although with more women on the committee, no different outcomes would occur, more attention would be given to environmental issues. Here is what he said when asked if having women on the committee would make a difference:

I don't think it would. I imagine with more women in the committee there would be probably more attention to the detail and more attention to protecting environmental issues and landscape visual impacts. I think there would be greater sensitivity to those values (Respondent# 28, Male from Unbalanced FAC)

5.4.8 Reasons Women Left the Committee

Interviewees were asked if, to their knowledge, any women had left the committee. From the study, it was found that reasons such as pregnancy, responsibilities to small children, shifting to different places and different jobs have compelled female members to leave their committees. Furthermore, the majority of the respondents clarified that no woman had left the committee because she felt unheard or ill-treated by male members of the committee. The respondents of two balanced committees in BC and Alberta were not aware of any woman leaving their committees so far, whereas the interviewees from one BC committee reported that six women had left the committee for various reasons. They further explained that one woman moved to a different place, two women left for maternity reasons, one left due to changing family circumstances, and two women became busy with other commitments.

Similar comments were made about women who left unbalanced committees. In BC, one woman changed her job, another left due to age, a third moved to a new city, and one woman was replaced by another male representative. A woman from an unbalanced committee in Ontario left the committee when her term expired, and she did not ask to continue. A respondent from one of the Ontario unbalanced committees was not aware exactly how many women had left the committee. However, he explained that if they had left, it was primarily because of maternity reasons or because they had changed employment. According to the respondent from New Brunswick, the committee never had a woman representative.

5.5 Representation of Values

In the next section of the interview, the interviewees were asked to describe the roles that they thought men and women have in the forest industry/forest management and forest values they were likely to bring to the committees. The majority of the respondents (64%) believed that men and women have the same roles in forest management, particularly when these roles are tied to their employment status and/or their position on the committee. However, more than half (53.6%) of the respondents described different viewpoints that women and men brought to the committee. The details of the interview responses are explained below.

5.5.1 Roles of Men and Women in Forest Industry/Forest Management

Only four of the respondents (two males and two females) described specific roles women play in forest management. They maintained that women had broader perspectives than men: they were planning foresters, environmentalists, and did mapping. Two of the responses are as follows:

They tend to be the soft science, that conservation, naturalist, non-timber forest products. You know that, the stuff that's not directly resource extraction (Respondent# 9, Male from Balanced FAC)

The women have a big role to play in forests, say if we want to keep some forest and we want to have some play areas for playing, we want to have some water quality and places some wild land left, there's a big role for us to play at that. (Respondent# 4, Female from Balanced FAC)

Similarly, four of the respondents (two females and two males) described the roles that men were likely to play, such as in management, business, harvesting, and decision-making. Here were two of the responses:

The men have a bit of a stronger association with the harvesting and the active management of the resource. (Respondent# 27, Male from Unbalanced FAC)

A number of the men on our group do work in the forest. They are foresters, they are contractors, they work in the forest and that's their economic life. (Respondent# 19, Female from Unbalanced FAC)

In the interviews, 18 respondents (64%) thought that men and women have the same roles in forest management and forest industries. Here is a typical response:

I really don't know whether there's a difference. They are all in one-way or another, they are all involved. Whether they are ranchers, professional foresters, sociologists, who have cultural interest, government people, elected people or have been elected people in the past, they all bring their attitude and their life experiences to the table. (Respondent# 2, Male from Balanced FAC)

One of the respondents highlighted that committee members expressed their opinions based more on their professional learning than on their gender:

I think that they can and should be different roles. I think in many ways in a way the Canadian society is at the moment, particularly as our committees and so on around forest management built up, I think the difference between the organizations is probably stronger than the difference between the genders of the representatives. So I've seen some women who are very strong defenders of a company position because that is their job. And I have seen the men who are very strong defenders of or proponents of the First Nations or of an environmental position. And so I think what we probably see more often is people taking on identity of the organization that they are representing rather than expressing the viewpoint that might be male or female. (Respondent# 11, Male from Unbalanced FAC)

5.5.2 Forest Values that Women and Men Bring to the Committees

Interviewees were asked to explain the forest values that women and men particularly provide. More than half (53.6%) of the respondents described different viewpoints that women and men have brought to the committee. The respondents emphasized that women focus more on the sustainable aspect of forestry management, on the aesthetic value of forest resources, and on the protection of the environment, whereas men mainly focus on the economic values of forest resources. Three of the respondents described the values they associate with women:

I don't want to say they were any more passionate than men are, but I think ladies are may be tending to look to the future more, wanting to make sure that the resources are

there. Going forward that we're not sort of wasting the resources and removing them from future generations, that sort of thing. Not to say men aren't, but the women tend to be a little more maternal in that respect. (Respondent# 14, Female from Unbalanced FAC)

It would be my belief that women would bring just more diverse uses of the forestry resource. I believe that the women would emphasize the fact that the forest has more values than just being a wood resource. (Respondent# 25, Male from Unbalanced FAC)

I think they bring an appreciation for the aesthetics on the landscape. They bring with them an attention to the non-harvesting values let's say they would bring an increased sensitivity to the committee for the environmental and aesthetic concerns. (Respondent# 28, Mal from Unbalanced)

On the other hand, the respondents highlighted the economic/utilitarian and technical values that men bring to FACs:

Some of the men that are forest operators bring very specific kind of business economic and technical values. Those that aren't in that forestry business directly might not have. It's more from the point of view that they are technicians as much as they are men and you know wanting to secure interest of their companies into the rooms so it's more about technical value and it just happened to be men. (Respondent# 24, Male from Balanced FAC)

Economic! That's what I find predominant, particularly in my involvement in the committee is that men raise the economic value of the forest. (Respondent# 25, Male from Unbalanced FAC)

About 46% of respondents stated that they did not perceive any difference in the forest values brought by men and women. Some of the respondents believed that the values members brought mainly came from their knowledge and learning from their professional experiences rather than from their gender:

The values that they bring are the values that they have learned while they gathered up knowledge in their profession and they gathered up the skills afterwards and practicing that profession. So, it's there are values that are not gender based, but are science based. (Respondent# 2, Male from Balanced FAC)

I just don't see on this group there are significant differences in what the different gender contributes. (Respondent# 22, Female from Balanced FAC)

I have got a small sample. Because most of the committee members are male, so it's hard for me to act that question. I can for most of the parts only speculate. I do not see a statistically significant difference between the male perspective and the female perspective in my experience in this committee. Perhaps in wider sample that difference might be noticeable but I don't see it. (Respondent# 5, Male from Unbalanced FAC)

No, it's not different. There're men and women up here kind of do same things for the committee, so I think their values would be the same as well. (Respondent#10, Female from Balanced FAC)

5.6 Process and Deliberation

When the interviewees were asked if some people participate more than others, around 89% of the respondents (88.8% of women and 89.5% of men) stated that some members of the committees were more vocal than others. The major reasons or barriers for uneven participation were personal behavior, area of expertise, and new membership to the committee (see Figure 5-3). However, none of the respondents indicated gender as a barrier to participating in the discussions.

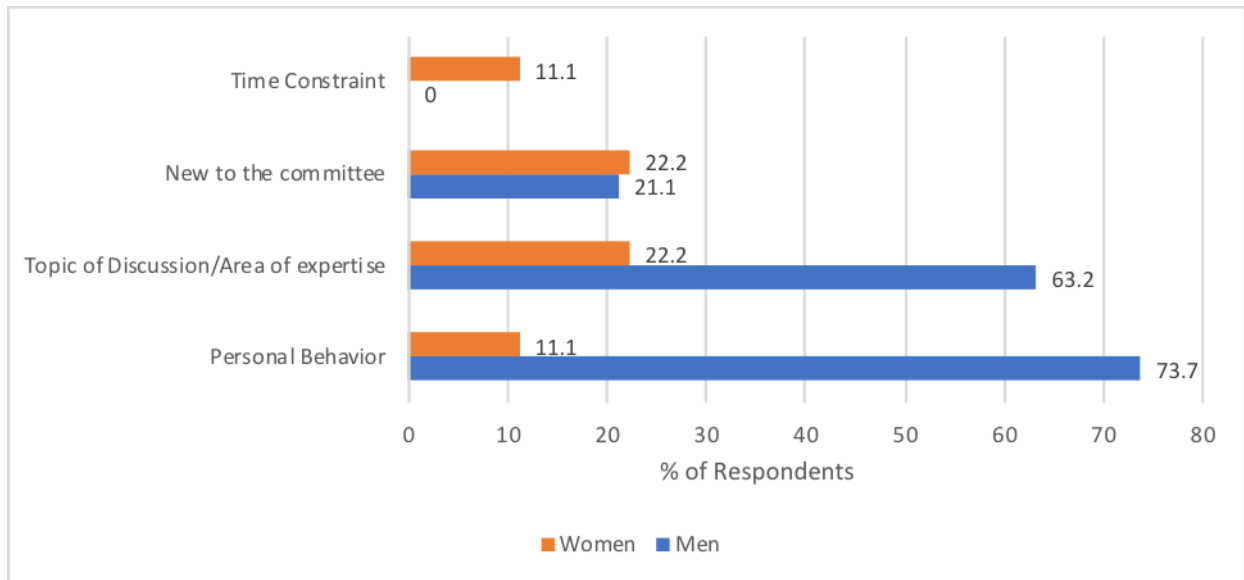


Figure 5-3. Reasons suggested by men and women for uneven participation in the discussion (N=28, Male=19 and Female=9)

About 50% of the respondents described personal behavior as one of the major reasons for uneven participation of men and women. Some outspoken individuals were found to speak more as compared to introverted members. When asked if participation was uneven, an interviewee responded this way:

Yes! Of course, they do. And that's typical of any volunteer group. You have doers and you have the quite ones. Those who speak out and those who don't speak until they have something that they want to say normally don't speak. And that's you know every voluntary groups that I've ever belonged to. It's the same way. (Respondent # 19, Female from Unbalanced FAC)

Similarly, 50% of interviewees indicated that members' level of participation also depended on the topic of discussion or their expertise on a particular topic. Respondents suggested that in their committee, members typically spoke up when the subjects of discussions were related to their interest and knowledge. One respondent expressed it like this:

I think it's related to the topic that's being discussed. I think level of participation is based on how comfortable they are with the topic that's being discussed. And as you know people are more comfortable with the topic or I guess their knowledge is greater in

the topic that's being discussed I tend to see them participate more (Respondent # 21, Male from Balanced FAC)

About 21% of respondents observed that new members were more hesitant to participate during the initial days and longtime committee members participated more in the discussions: A female respondent discussed her own experience as a newcomer:

I think new people are quiet. Usually when someone new comes on like when I was new, I didn't speak up very much in the beginning. I think just being new and before they figure out what's going on, people can be quite quiet. But it is very open environment. They are pretty good like if you put your hand up, they'll definitely listen to you. (Respondent # 16, Female from Balanced FAC)

One female respondent was frustrated that facilitators could not provide enough time or equal opportunity for individuals to share their views. She indicated that sometimes members were given plenty of time to share their views, whereas other members were not provided with adequate time to describe their opinions due to time constraints:

Yes, I think that some of the facilitators that we have had they don't give us enough time to say what we want to say. They want to push the agenda as fast as they can because of course they're being paid, you know and they want to return home like everybody else. So that is one of the things that some of us didn't like at all. They rush to close issue, rush the things and they don't want to stand, I mean some people are long-winded when they get into the discussion and they don't know enough to shut up. But some of us do have very important things to say and it's "Push! Push! Push! We've got to get this meeting done, we got to move on something else." (Respondent # 4, Female from Balanced FAC)

Two female respondents stated that the participation in the meeting was even:

It is pretty even. There is no one on this committee who is a real talkaholic and tries to dominate (Respondent # 22, Female from Balanced FAC)

The facilitator is very good at making sure that everyone who wants to speak can! That everyone understands! She is always very careful to make sure that no one uses jargon or

acronyms and she looks for nods that everyone understands and everyone is happy with what has been decided or what's going forward. I don't see anyone feeling frustrated or unable to keep up. (Respondent # 14, Female from Unbalanced FAC)

One discontented male respondent highlighted the perception that the advisory committee was an information-sharing forum rather than an advice-giving organization and the ineffective ways the meetings were organized as barriers to active participation.

The first and the biggest barrier is that this is not seen as a discussion and decision making forum. This is seen as a place for the company to provide the information and vow to the participants to ask the questions related to that information. So obviously that is the biggest barrier and that is to do with the mandate, objectives of the committee. Another element is just the way that the meetings are organized. The meetings are organized in a classic university or school environment. There's a speaker at front who, speaks about something and you can propose questions on that. If you wanted to communicate that information effectively, then you could do much more effectively through power points, through interactive websites with better use of the GIS tools. There are number of ways that could be done. (Respondent # 11, Male from Unbalanced FAC)

5.6.1 Strategies Recommended for Active Participation

Despite some reasons given for uneven participation, all the respondents suggested that, in their committee meetings, most of the members participated well when they felt they needed to. Some of the strategies recommended for active participation included the following: acknowledging/appreciating/encouraging participation in discussions; using photographs, and flip charts; using laymen terms/avoiding jargon; taking field trips; and creating small working groups. Two female respondents suggested that use of photographs, plain language, and one-on-one discussions could improve member participation in the meetings:

Using photographs, using laymen terms, making sure that the people are being spoken to at the level that they can understand. (Respondent # 14, Female from Unbalanced FAC)

I do think that they could probably do get more people that are more introverted to be able to express their opinion by either having written portions of the meetings or maybe

one-on-one discussion instead of group discussions. (Respondent # 20, Female from Balanced FAC)

Some respondents highlighted the role of a facilitator or chairperson to encourage active participation from the members. Ideas included appreciating members for their contributions to discussions, recording commentaries to add more information, and breaking down a large group into smaller groups. One respondent had several specific suggestions:

I think that some people who don't volunteer their thoughts each time could be invited to speak up, specifically. The chair could ask individuals what their opinions are specifically, "What do you think?" So sometimes it's nice to invite people to speak their opinion. Also, we could break out some more round table discussions. You could separate us into groups of like four people to have a more one-on-one discussion. Sometimes that brings out different contributions. You can create the environment that is fairly welcoming for sure. (Respondent # 27, Male from Unbalanced)

5.6.2 Women's Participation at the Table

Almost all respondents stated that women participated equally and the same as anybody else. Interviewees suggested that there was not any kind of partiality based on gender and women were equally provided with an opportunity to share their views, the same as for men. Two interviewees expressed the following views:

I've never heard women being talked-down or anything like that. I think their input is valued. (Respondent # 16, Female from Balanced FAC)

It depends a lot on the topic that we are talking about. I don't think we separate based upon sex, I think it's what area of expertise. If this is their area of expertise, it does not matter, if it's a guy or girl. (Respondent # 9, Male from Balanced FAC)

One of the male respondents maintained that women who participated on the committee were often found to be heads of their institutions or professions, so they were very capable of sharing their viewpoints in a group and contributing to the discussions at the meetings.

The women who are participating are often leaders in their community. So they are used to participating in groups and are very good about providing their community

information, asking questions for clarity to make sure that they understand because that's what they do. They are very able, they are excellent participants. (Respondent # 24, Male from Balanced FAC)

One of the female respondents indicated that although women were provided with an opportunity to speak up and men listened, women could not be ensured that their views were considered during the decision-making process:

Yes, women are heard at the table. Yes! Men listen. They listen to what you have to say: that doesn't mean that they agree and that doesn't mean that there's gonna be something that's gonna happen. But they will at least listen to you. They won't, they don't dare harassment and all that kind of stuff, they don't dare say anything that they shouldn't. (Respondent # 4, Female from Balanced FAC)

One of the female interviewees suggested that women were more likely to participate in smaller groups than in a large group:

The women when we break up into smaller groups, they talk a lot more. When we are one big group, sitting in a big U, women don't tend to talk much. (Respondent # 16, Female from Balanced FAC)

5.6.3 Critical Mass

Interviewees were asked in turn if having more or less women or men on the committee would influence their participation in the discussions and decision-making at the meetings. The rationale for these questions comes from the literature on critical mass. The responses to the question, “do you think having more/less women on the committee would have an effect on your participation in discussions and on the decisions you make?” are shown in Figure 5-4.

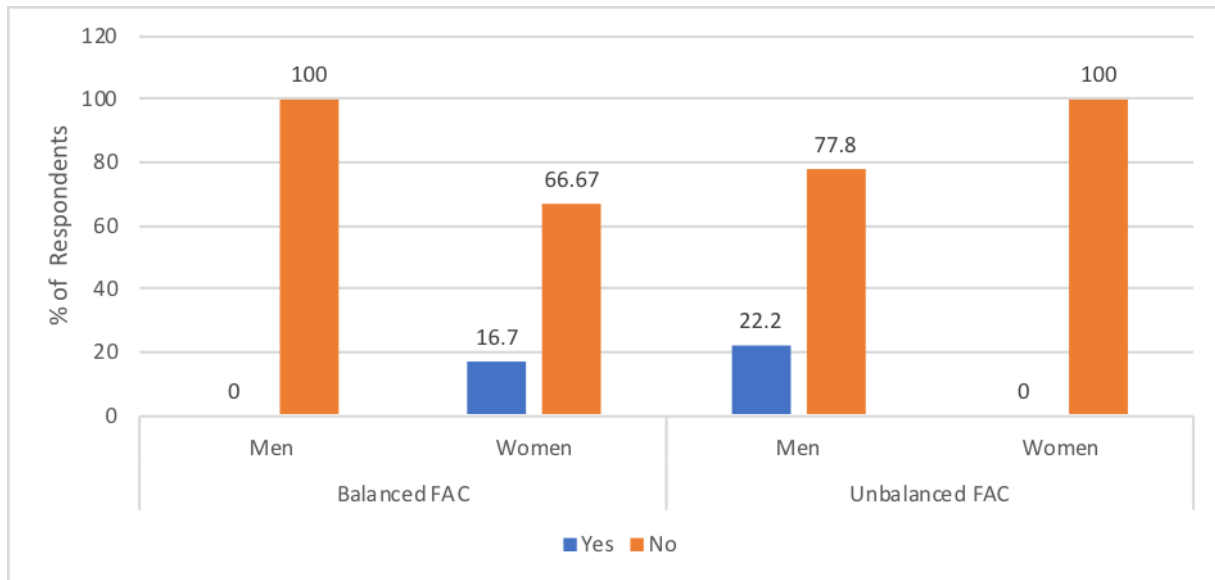


Figure 5-4. Do you think having more or less women on the committee would have an effect on your participation in discussions and in the decisions, you make? [Total=28 Interviewees, Balanced FAC (Male=10 and Female=6) and Unbalanced FAC (Male=9 and Female=3)]

About 89% of men and 78% of women responded that the number of women present on the committee did not impact their level of participation in the discussions and decision-making process. Two of the respondents responded this way:

No, I don't think so. People don't join because there are women there. People join because they want to stay in forest management. (Respondent # 19, Female from Unbalanced FAC)

I don't really see whether there's four women sitting on a table or one woman sitting there. I don't think that anybody coming to our meetings feel intimidated. So, I mean, I don't think anyone could come to the meeting and say, "I don't feel comfortable about speaking up." You know we encourage participation regardless of gender. (Respondent #5, Male from Unbalanced FAC)

Only about 10% of respondents reported that having more women could influence their views or participation in committee meetings. When asked if having more women on the committee would encourage women to speak up, one female respondent clearly stated that, yes,

more women would mean they would have a collective voice and be able to convey their message more strongly:

Oh definitely! Definitely!! Because we just gang up on these guys and tell them "No, it's not going to be done that way." (Respondent # 4, Female from Balanced FAC)

Similarly, two of the males argued that with more women on the committee, they could emphasize the aesthetic or intrinsic values of the forest resources as well as express their concerns to environmental issues more effectively:

I believe that having more women participating would help in my emphasis of things such as reduced herbicide application use. Also, possibly in emphasizing the values the biodiversity in a forest. I believe that the more female participation would land the balance that would help in achieving some of the views that I have for proper sustainable management. (Respondent #25, Male from Unbalanced FAC)

From my environmental interest perspective, I think it would. More female presence on the committee would certainly help the sensitivity of the committee to aesthetic values, landscape values as well as environmental issues, concerns. Yeah, I think women would bring a sober sensitivity into the committee. (Respondent #28, Male from Unbalanced FAC)

One of the female respondents suggested that women would feel more comfortable to speak up if there were other women present on the committee, particularly when they were new to the committee:

I think may be at the beginning, it would have. But because since I'm there for six years now, I quite feel comfortable with most of them and I'm okay speaking up. I think initially, yes! (Respondent #16, Female from Balanced FAC)

Similarly, interviewees were asked if having more or less men on the committee would influence their participation in the discussions and decision-making. About 84% of men and 78% of women responded that the number of men present on the committee did not impact their level

of participation in the discussions and decision-making. The responses from men and women are highlighted in Figure 5-5.

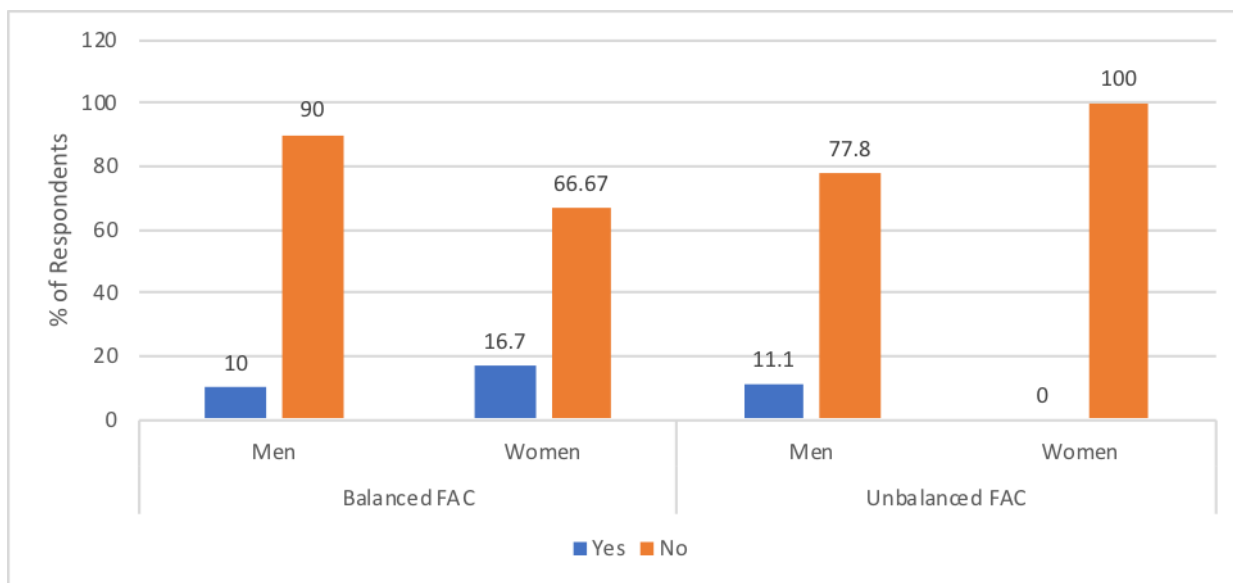


Figure 5-5. Do you think having more or less men on the committee would have an effect on your participation in discussions and on the decisions, you make? [Total=28 Interviewees, Balanced FAC (Male=10 and Female=6) and Unbalanced FAC (Male=9 and Female=3)]

As expressed in the following two responses, the majority of respondents (82.1%) believed that the number of men on the committee did not impact their level of participation in the discussions and decision-making process:

I don't see it has anything to do with sex; it has to do with knowledge. I don't care whether they are male or female. If they have the knowledge, I respect that knowledge. (Respondent #13, Male from Balanced FAC)

It might impact younger people and it might have impacted me when I was earlier in my career. But at this stage, no it wouldn't change if it were all men; I would still go on participating. (Respondent #20, Female from Balanced FAC)

Only 10% of interviewees (one woman and two men) stated that having more men on the committee would make them uncomfortable to share their views and the committee might become more technical. Three of the respondents replied this way:

Yes! If there were all men I would definitely feel less able to speak up. Absolutely. Older white men. Yeah! (Respondent #16, Female from Balanced FAC)

Well, I'm not the very assertive or let's say I'm assertive when I have to be but I must say I do feel some intimidation when there is a preponderance of males present. Yeah, I think I find it a little intimidating to have more men (Respondent #28, Male from Unbalanced FAC)

I think if there were more it might because as I say the tendency for the men in the group to be technicians so it might become more technical. I'm guessing a bit but it might become more technical as there were more men but again there would be something that if that was the case and there was something being the lost, the value was seem to be diminished for the company. I think there should be steps taken to ensure that balance was back again. (Respondent #24, Male from Balanced FAC)

Two of the respondents suggested that having fewer men would be appropriate. One female respondent expressed her views in this way:

Having less men and more women might make it go a little bit slower, but we also might come up with some better ideas and some better decisions. (Respondent #4, Female from Balanced FAC)

5.6.4 Under-Represented Groups in the Committee

About 39.3 % of the respondents stated that Indigenous groups were under-represented on the committees. The other poorly represented groups suggested by the respondents were environmental organizations (four respondents), oil and gas (three respondents) and educational institutions (one respondent).

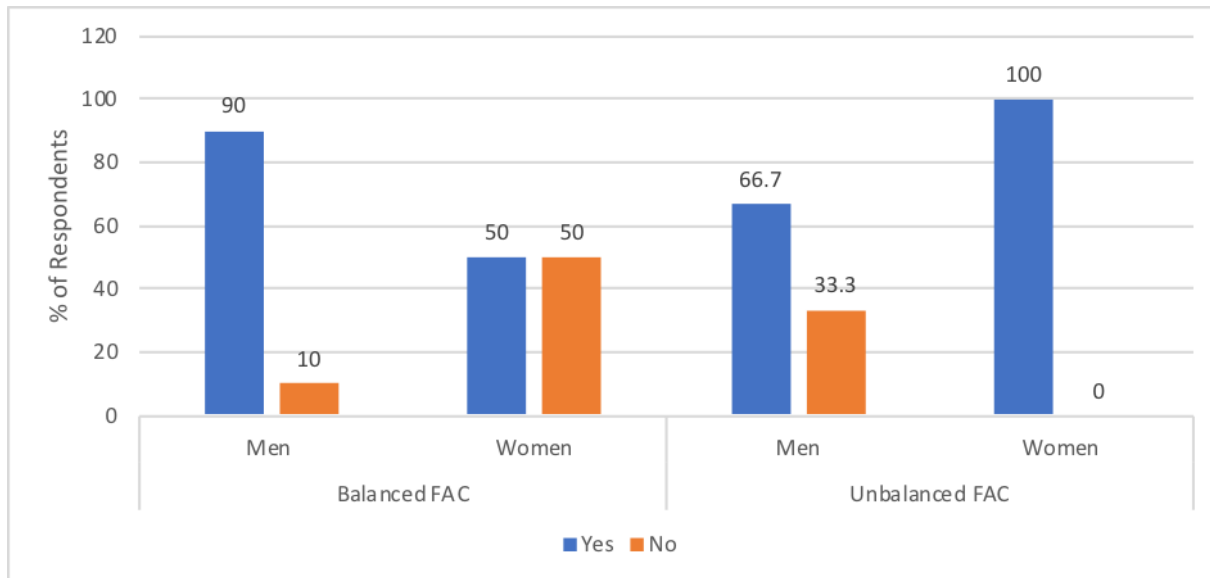
Regarding Indigenous participation, respondents suggested that it was difficult to have regular representatives from the Indigenous groups as they frequently change and were often hesitant to participate actively in committee discussions. The respondents highlighted possible reasons for poor representation of Indigenous representatives as their independent identity, more demands on these groups for consultations, and lack of staff in their organizations:

I think part of it is that, I think, they're looking at self-governance. I think they're looking and saying that some of these areas are being harvested are actually part of existing land claims. And they are afraid to participate in our process that they may be hurting their process. So, I think that's a little bit of the concern that they want to be free and independent. (Respondent # 7, Male from Unbalanced FAC)

The committee tries to be inclusive and First Nations, I would say, they have sort of difficulty having good representation there partly because there is so many demands been put it on First Nations nowadays, being consulted for anything and everything. They tend to have limited staff and often they have to travel. They are not living in (name of a place where FAC meet), and some have to travel from somewhere an hour to two hours or more. So I think it restricted First Nations input because they don't live in town and that's just road condition or whatever (Respondent # 23, Male from Balanced FAC)

5.7 Effectiveness of FACs

When interviewees were asked if they thought their committee was effective in contributing to sustainable forest management, the majority of respondents (75%) reported that their FACs were effective, whereas 25% thought that their FACs were not effective. A higher proportion of male interviewees (78.9%) than female interviewees (66.7%) believed that their FACs were effective. Of the six female respondents from the balanced FACs, three believed their FACs were effective and another three women thought their FACs were not effective in contributing to sustainable forest management (see Figure 5-6). On the other hand, all (three) of the women interviewees from unbalanced FACs stated that their FACs were effective in contributing to SFM.



5-6. Do you think the committee is effective in contributing to SFM? [Total=28 Interviewees, Balanced FAC (Male=10 and Female=6) and Unbalanced FAC (Male=9 and Female=3)]

The key reasons provided by the respondents who believed their FACs contributed to achieving sustainable forest management goals were as follows: first, forest companies considered their recommendations while making forest management or operational plans, and, second, the committee ensured that the forest companies met the criteria and indicators of SFM and forest certification processes. Two of the interviewees had this to say about the contributions of FACs to sustainable forest management:

I absolutely believe that the activities this committee have been very important to sustainable forest management. I have continued to participate in a committee because I feel that we do perform as a valuable function. We are not attending these meetings simply to rubber stamp decisions made by Department or Ministry of Forestry. We deliberate and we make recommendations and if it wasn't for the fact that I feel our recommendations were taken into an account, I wouldn't have continued for twenty years, if I didn't see lot as a valuable function. (Respondent #5, Male from Unbalanced FAC)

I think it is yeah. It is because I have seen (name of forest company) make adjustments to the operations in response to the recommendation that came out of the public advisory group. So, they have actually changed things or how they do business and as a result of, I mean so the sustainable forest management plan. So, I think it's fairly effective. (Respondent # 9, Male from Balanced FAC)

Around 25% of respondents indicated that FACs were not effective in contributing to sustainable forest management. They believed that the main reason forest companies have FACs is to fulfil the requirement for forest certification rather than to consider FACs as an advice-giving forum for SFM. Two respondents responded in this way:

I think that it's in a very narrow box with the criteria and indicators that we are managing forest and the forest industry, this particular forest company is gaining from the input of the public advisory groups. But a lot of the things that we might have concerns about, may or may not be adequately addressed within the framework of the certification process and sometimes we are allowed to discuss those things but often, it's meant to advance what the company has to do for the certification. (Respondent #20, Female from Balanced FAC)

I would like to see it more effective. Because sometimes I find members having good ideas and they will bring it up to the recommendations and sometimes the company will turn down flatly and they won't tell us why. Then will come up and say, "We want a reason why? Why did you find it's not suitable in this case or tell us! We would like to know." And the other thing I find sometimes is that the company makes decisions which I really think they shouldn't. If we're going to be called an advisory committee and I think an advisory committee should advise. It doesn't matter what the thing is, you bring it out even if they have their minds made up, at least get our input. Because nobody likes to go to meetings every month and be a "Rubber Stamp." (Respondent # 1, Male from Unbalanced FAC)

Strategies to improve effectiveness of FACs

Interviewees were asked to explain possible strategies to increase the effectiveness of the committees. Some strategies suggested were as follows: integrating landscape management for better coordination; promoting FACs to obtain more public input into the committee; improving the representation of women and Indigenous groups as well as young people; giving more decision-making power to FACs; considering the advice provided by FACs by the forest companies; clarifying guidelines from government on expectations from the FACs; and

providing more field trips or more exposure to different types of forestry operations as they would be very helpful. Two interviewees elaborated on their suggestions:

That would require a willingness on part of Forestry Company to directly have a different sort of process. It would require much clear setting of direction from the government that this is what was expected? The status quo in terms of the committee's guidance was not acceptable. And it would also require some much better resources in terms of how to run an effective committee. People who run the committee do so adequately for the committee as they see it. But would not be capable of running a committee if you wanted to have a broader decision making advisory goal. So, I think you need a willingness and vision from the company. You need an engagement from the government and clear guide line, direction set by the government "This is expected from and the minimum standard." Also, you need some you need much better experience and knowledge among your committee facilitators on how to do it. Then you'd also have to have a much broader representation with different people coming in and an engagement from these people. (Respondent # 11, Male from Unbalanced FAC)

I think the company could do much-much more in seeking advice from the committee than what's happening today. I've told them that " You have to rather than thinking on what you should inform us at the next meeting, you should think more of what do you want to know from us as a committee." And that is called a lack of imagination in the design of each individual meeting. (Respondent # 26, Male from Balanced FAC)

5.8 Summary

This chapter analyzed the responses from the interviews conducted with 28 participants (19 men and nine women) associated with three gender-balanced and five gender-unbalanced FACs. The findings revealed that respondents have diverse experiences participating on the committee. However, there were not any key differences observed in the responses between men and women belonging to gender-balanced and unbalanced FACs in relation to the following: whether their expectations were met; whether the number of women on the committee impacted

final decisions; and whether the participation levels of men and women were affected by having more or less men or women on the committee (critical mass).

The results showed that more than half of the men and women interviewees were satisfied as their expectation were met by participating on FACs. Around half of the respondents thought that their FACs were not gender-balanced in their composition and professional viewpoints, whereas two respondents from unbalanced committees maintained that gender balance was not considered to be an important issue within their committees. In the case of gender-balanced FACs, the majority of respondents suggested that although there were no conscious efforts made to ensure an equal number of men and women on their committees, they valued women's involvement.

Less than one-third of respondents reported obstacles that prevented women from participating on the committee. The major obstacles hindering women's participation on FACs were male dominance in forestry-related organizations, child-care responsibilities of women, and evening meetings. Regarding the strategies to improve women's representation, the majority of the respondents suggested requesting women representatives during the recruitment and organizing activities to raise women's awareness of FACs. Even though almost all the respondents believed that women have valuable perspectives on sustainable forest management, only 25 % agreed that the number of women present at the meetings would influence the outcomes. The major reasons why women left FACs were for maternity, moving to a new place, and taking up new jobs.

Only four respondents suggested that men and women play different roles in the forestry sector; the majority believed that women and men have the same roles in forest management. Some of the roles described for men were in management, business, harvesting and decision-making, whereas those for women were in soft science, environmental management, planning of forests, and mapping. More than half the respondents described different perspectives that women and men bring to the committee. The interviewees suggested that women bring environmental concerns, sustainable aspects of forest management, and aesthetic values of forest resources, whereas men primarily focus on the economic values of the forest. Almost all the respondents reported that some people participate more than others in the discussions at the meetings. The primary reasons preventing members from participating in the discussions were personal behavior, area of expertise, and new membership on the committee. Some of the

strategies suggested to overcome those obstacles were encouraging or appreciating of participation by the facilitators or chairpersons, using plain language, using photographs/flipcharts, and working in small groups.

Almost all respondents stated that women participated very well and in the same way as men. They were heard at the table and were provided with equal opportunity to share their views. The majority of respondents suggested that having more or fewer men or women on the committee had no impact on their level of participation in discussions and decision-making at the meetings. More than one-third of respondents suggested that Indigenous groups were poorly represented within their FACs. About 75% of respondents believed that their FACs were effective in contributing to sustainable forest management. Notwithstanding this positive response, interviewees had suggestions for improvement. Some of the strategies suggested for improving effectiveness were as follows: improving the representation of women, Indigenous groups, young people, and other concerned stakeholders; treating FACs as advice-giving bodies rather than information-sharing forums; and setting clear guidelines from government on expectations of the committees.

The following chapter will discuss the findings from both surveys and interviews thematically and will offer insight into the representation of women in the committees, obstacles that hinder women's participation on the committee and around the table, strategies to overcome those obstacles, consequences of poor representation of women and its impact on discussions and decisions made, differences in values represented by men and women, and effectiveness of FACs in contributing to SFM.

CHAPTER 6

DISCUSSION

6.1 Overview

This research has evaluated the experiences of FAC members and their interpretations of the effectiveness of FACs in contributing to SFM. Research was carried out mainly in the form of a questionnaire survey and interviews at the national level. This chapter discusses the results obtained from both the national surveys of 2004 and 2016, and the interviews conducted in 2016 to determine any changes in membership structure and the deliberative processes over the past 12 years. It also critically examines a gender-gap in the FACs, women's participation in the committees and around the table in the deliberation processes, explores the obstacles that have prevented women's involvement on committees, and the possible incentives to make FACs more diverse. Lastly, this chapter evaluates the effectiveness of FACs in contributing to SFM based on the responses obtained from the 2016 survey and the interviews conducted in 2016.

6.2 Undertaking a Gender-based Analysis of FACs

This section discusses and evaluates the practice of FACs based on both the survey results and the interview findings, considering the key process criteria described in Chapter 2. These criteria are: clear terms of reference, early and ongoing involvement of public, representativeness, deliberative procedure, authenticity, transparency, accountability and effectiveness. This section starts with explaining regional variances in the proportion of women respondents over the past 12 years through the national data. Then, it explores in detail the reasons for poor representation of women on FACs, and considers, in greater depth, the reasons for men and women to join FACs, the values held by men and women, and the level of satisfaction they hold on various aspects of committee's work and process.

6.2.1 Regional Variances in the Proportion of Women Respondents Across the Years

The earlier chapters revealed that Canadian FACs are still a 'man's domain' like the forestry sector as a whole. The women respondents made up less than 21% of all survey respondents with an increase of only 2% from 2004. Nonetheless, there have been some regional variances across the years, which I will try to explore through the national data. This consideration assumes, however, that those most qualified to participate on FACs are those who

have a direct employment interest in forestry and forestry related activities. Table 6-1 shows the number of men and women employed in ‘forestry and logging and support activities for forestry’ for the years 2004 and 2016 acquired from the Labor Force Survey estimates (LFS), by North American Industry Classification System (Statistics Canada, 2017).

Table 6-1. Number of men and women employed in the forestry and logging and support activities for forestry for the years 2004 and 2016

	2004				2016			
	Men (N)	Men (%)	Women (N)	Women (%)	Men (N)	Men (%)	Women (N)	Women %
Canada	61700	--	9900	--	39600	--	8500	--
Newfound Land and Labrador	1100	1.78	0	0	641	1.62	0	0
Prince Edward Island	83	0.14	0	0	50	0.13	0	0
Nova Scotia	3200	5.18	433	4.38	2100	5.3	117	1.37
New Brunswick	4900	7.94	458	4.63	2900	7.32	342	4.02
Quebec	18400	29.82	2100	21.21	8100	20.45	1050	12.35
Ontario	10200	16.53	1358	13.72	5600	14.14	433	5.1
Manitoba	1000	1.62	0	0	483	1.22	42	0.49
Saskatchewan	1125	1.82	0	0	658	1.66	133	1.57
Alberta	3600	5.83	150	1.51	3200	8.1	292	3.43
British Columbia	18000	29.17	3500	35.35	15600	39.39	3800	44.71

(Source Statistics Canada, 2017)

Note: Where number ends in 00, they have been rounded based on data from Statistics Canada

As shown in Table 6-1, the highest proportion of female forestry employees were found in British Columbia, Quebec and Ontario whereas, there was not a single female forestry employee reported in NL and PEI, for both the years 2004 and 2016. This proportion is also reflected in the member’s questionnaire’s results where the higher proportion of women respondents were from Quebec and British Columbia for both the years 2004 and 2006 and the lowest were from the Atlantic region for the year 2016 and the second lowest for 2004. One of the reasons for larger number of women respondents in provinces such as Quebec and British Columbia can be partly attributed to the operation of large forest companies (based on AAC allocations) in those provinces and relatively more opportunities for women to get jobs in such provinces as compared to other provinces (NRC, 2016). Additionally, these provinces have

larger number of FACs as compared to other provinces which likely increased the proportion of female respondents in these provinces.

The number of both men and women employed in the forestry sector has drastically declined in Quebec since 2004. Correspondingly, the number of FACs identified decreased from 108 in 2004 to 38 in the 2016 survey. A likely explanation for a massive decline in the number of FACs in Quebec is changes made by the provincial government to regional and local governance structures in 2015. According to Nadeau (2018), this restructuring basically abolished the organization that had taken a strong lead in establishing the FACs to meet the requirement of the new forest policy. She further explained that in each region, there was less funding available for FACs and they were required to reorganize. A few regions maintained their original committees, but most became part of a larger cluster, thus reducing the number of committees (Nadeau, 2018 - personal communication).

The chairperson's survey revealed that the highest proportion of women representatives on the committees were found in Alberta (with an average of five women in a committee of 17 members). This result may be, in part, explained by the increased number of female forestry employees in the region across the years. (see Table 6-1). Similarly, the increase in the proportion of women respondents in 2016 survey for Prairies may be linked to the increase in number of female forestry employees in the region.

This is only one of many possible explanations for regional changes in number of women over the years. However, the data revealed that women were more likely than men to attend meetings because of their job requirements, particularly in Quebec. Hence, it is useful to consider whether changes in employment in the forestry sector may have an impact on the proportion of women and men participating in FACs. If FACs continue to be composed of sector-based interests, then understanding the gender composition of the forestry sector remains relevant to understanding representation.

6.2.2 Why is Gender Representation on FACs as it is?

The composition of FAC's membership was problematic from a gendered perspective. In attempting to understand the reasons or obstacles that have prevented women from participating on the committees, follow-up interviews were conducted with participants of FACs. I will

explore some of the key reasons highlighted in the interviews for gender imbalance and some potential ways to address it. They are as follows:

6.2.2.1 Persistence of gender-based stereotypes and family responsibilities

The reasons provided reflect the persistence of social structures, gender roles, prejudices and gender-based stereotypes that also make it difficult for women to enter the highly male-dominated forestry sector. Participation in the committees is entirely voluntary and the meetings are generally scheduled in the evenings – characteristics that, according to interviewees, impacted more women than men because women are still considered the primary caregivers. This perception is supported by data from Statistics Canada that show that in 2010 Canadian women spent an average of 50.1 hours per week on unpaid child care, which is more than double spent by men (24.4 hours) (Statistics Canada, 2011). Similarly, women spent more time than men on domestic work. In 2010, while women spent 13.8 hours per week doing housework, men spent only 8.3 hours (Statistics Canada, 2011). This information was supported during some interviews such as when, one of the female interviewees clearly stated:

I think one of the biggest obstacles for participating is that women are still primarily in charge of their households and kids at the end of the day. So, to leave the family for four-five hours every couple of months to go participating in meetings, I think there's a barrier with childcare especially, if you are a single parent. In these things, guys can get away. They are not expected to worry about stuff like that. (Respondent #15, Female from Unbalanced FAC)

Similarly, another female interviewee noted that work and family obligations hinder younger women's participation in the committee whereas senior women do not generally consider spending their voluntary time serving advisory committees for forest management. Moreover, both the 2004 and 2016 chairperson's survey illustrated that none of the FACs offer any compensation for childcare expenses while parents attend the meetings. Relatedly, one of the male interviewees noted

I have heard couple of people saying, 'I cannot make it because my husband is away. So, I gotta look after the kid tonight.' ... How to overcome that? Yeah that's up to their family dynamics... The other options would be to provide some sort of baby sitting or some

options for them to bring their kids so that they can attend the meeting and kids would be entertained but, it hasn't happened. (Respondent #9, Male from Unbalanced FAC)

It is likely that adequate provision of childcare while parents attend the meetings might improve the participation and attendance of young members with families, especially women.

6.2.2.2 Gender-gap in forestry and forestry-related sectors

FACs generally adopt a stakeholder-based model of engagement. Although theoretically, stakeholder-based models of engagement are considered to be more inclusive than expert-based models of engagement, there remain issues related to ‘who determines who has a stake and how groups may be represented?’ (Varghese & Reed, 2012, p. 5). Stakeholder-based models of engagement in forestry seem to affect who participates as women are less likely than men to be engaged in forestry and related organizations and more likely to be part of health, education, and social service organizations that are not typically considered to be related to forestry.

Although women account for around half of the national labor force in Canada, women’s engagement in the natural resource industries such as in the forestry, mining, oil and gas industries remained below 20 % in 2015 (see Figure 6-1) (Statistics Canada, 2016; NRC, 2016). Both the data from the national survey and national statistics strongly indicate that forestry is still dominated by men, which is also reflected on the forest-sector advisory committee.

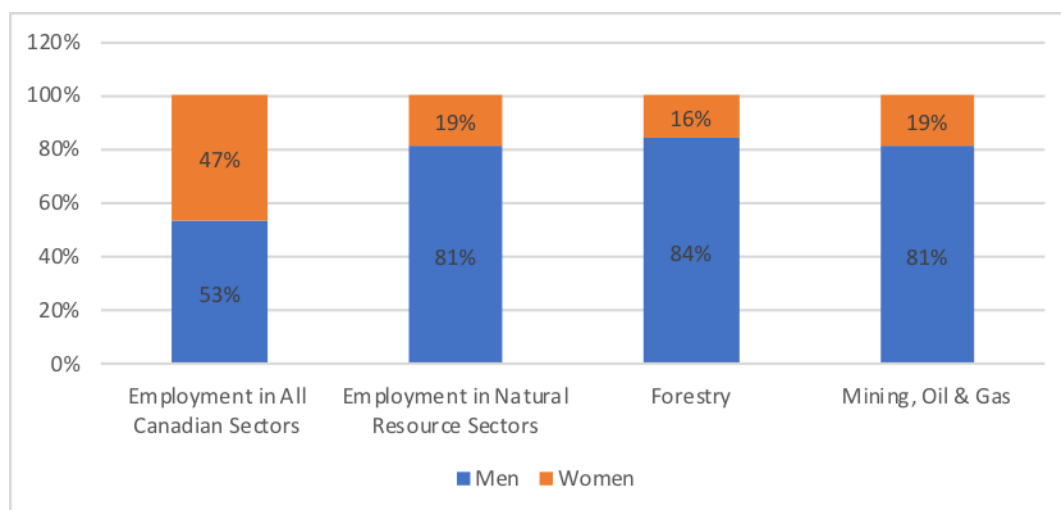


Figure 6-1. Proportion of men and women in Canadian Labor force for the year 2015

In terms of access, both the 2004 and 2016 surveys revealed that women were more likely to participate on the committee when they were required to attend as part of their job (though there has been decrease in the proportion from 48.9% in 2004 to 35.7% in 2016). Given fewer women are employed in forestry, the value placed on this kind of expertise for the advisory committee, and that women attended because of their job, I investigated whether women were selecting forestry or related fields as a career option. I tried to find statistics on the number of men and women enrolled in the forestry programs in Canada; however, it was difficult to find the statistics on forestry separately as it is often combined with other natural resource sectors. Nonetheless, the statistics of female students enrolled in the largest forestry Faculty in Canada at the University of British Columbia (UBC) have been considered to represent the situation of women's enrollment in the forestry program. The numbers show that women find the forestry programs less attractive than men, and women were more likely to choose the natural resource conservation program than other forestry programs (see Table 6-2).

Table 6-2. Number of students enrolled in the faculty of forestry at UBC for 2016/17

B.S.F (Bachelor of Science Forestry)	Male	Female	Total
First Year	72	39	111
Second Year	42	26	68
Third Year	45	17	62
Fourth Year	40	12	52
Total	199	94	293
Wood Products Processing			
First Year	30	7	37
Second Year	27	13	40
Third Year	17	7	24
Fourth Year	33	21	54
Away on exchange	2	0	2
Total	107	48	155
Natural Resource Conservation			
First Year	33	58	91
Second Year	32	51	83
Third Year	37	67	104
Fourth Year	29	44	73
Away on exchange	2	7	9
Total	131	220	351

Source: Student's enrollment statistics 2016/17, University of British Columbia

On a positive note, the Faculty has claimed an increase in the number of women completing their education in forestry programs and receiving the professional degrees in recent years (UBC, 2017). It is possible that with the increase in the number of professional women foresters in the sector, women's representation on the advisory committees may also increase.

6.2.2.3 Other reasons

Similarly, a number of interviewees identified other possible reasons for women's poor representation on the committee. One of the reasons suggested for underrepresentation of women in FACs was a lack of awareness about the existence and activities of FACs by the wider public. One member stated

I think you're gonna get hard time getting more women to come..., and the worst thing of all is there's not a lot of people who know about these things... I think they even don't know the process exists or what it tells or what it involves? Or actually what we do.
(Respondent #4, Female from Balanced FAC)

This finding indicates the need to advertise/promote the activities and achievements of the FACs to make the public aware of their existence, especially among women.

The interview results also revealed that many interviewees have yet to consider gender imbalance an issue.

To be honest I don't think anybody has really thought about female representation on the board. So, it's just trying to get members in first place that represent the different sectors not that we are going to start targeting, to get in even representation of men and women. I think our biggest challenge over last couple of years has been getting people to participate. So, at this point we still kind of, whoever is willing to participate, that's great. (Respondent #15, Female from Unbalanced FAC)

Given this finding, it is evident that even after more than two decades of their formation, if FACs are still struggling to fill seats at the table, achieving gender-balanced-committees may be far more challenging. Moreover, by overlooking the issue of gender inequality, these committees have been disregarding the benefits of gender-balanced workforce and the important ways it affects processes and final outcomes (Arora-Jonsson, 2008; Lidestav & Reed 2010).

When the respondents from the balanced-committees were asked how they were able to

ensure gender balance on their committees, almost all of the interviewees suggested that there were not any measures taken to balance the committees, they just came out that way. One of the male interviewees stated that “I don't think it's anything that is directed. It's people who do come to the group just happened to be a fairly good representation of both male and females.” Overall, all these findings suggest that there was not any conscious effort taken to increase the proportion of the women on committees to make them gender-balanced and it seemed that balancing of gender was never a priority or a part of the objectives of the FACs surveyed.

To explore possible opportunities for women to join the FACs, I analyzed the results of chairpersons' survey questions related to the recruitment process and frequency of member's turnover. Both the 2004 and 2016 chairperson's survey results indicated that most recruitments were done by word-of-mouth and through the connections of the existing committee members. It was likely that more men joined the committees than women, considering the presence of the large number of men on the FACs and their possible networks. One of the respondents (chairperson) explained “There is no active recruitment. Enrolment of new members is infrequent and usually comes about on recommendation by an existing member”. Recruitment by word of mouth may perpetuate gender imbalance if there are not ways to bring a broader set of viewpoints and interests to the table.

Similarly, the 2016 chairperson's survey results illustrated that there was a low frequency of member turnover in the FACs. This is consistent with the findings from the interviews. One of the interviewees noted “Many of the members have been members for substantial amount of time. Several members including myself have been here from day one.” In this situation, it is likely that there is a less opportunity for new individuals to join the committee. It can thus be considered that continued association of more satisfied members with the committees has also prevented women from joining these committees.

6.2.3 Gender Roles and Perception of Forest Values

Interview results suggested that women were likely to be environmentalists and tended to be involved in “soft science”, whereas men were likely to play roles in management, harvesting, and decision-making processes. In both 2004 and 2016 surveys, women respondents were more likely to be members of environmental organizations and natural history or bird watching clubs, whereas men were more likely to belong to hunting and fishing organizations. This finding is in

line with the traditional ideas that men appreciate the environment through outdoor activities such as hunting and fishing while women are more likely to participate in non-extractive activities and/or are concerned with environmental risks that may affect their families (Seager, 1993). Seager (1993) further explained that women experience the impacts of environmental problems differently than men. Because women have traditionally been responsible for raising and protecting children and often remain closer to home, Seager argued that women were well positioned to notice changes in their surroundings and be "hardest hit by a diminished resource by exposure to toxins, and by localized pollution" (Seager, 1993, p. 271).

In terms of the forest values that men and women bring to the table, there were significant differences between the values held by men and women. These findings are consistent with the findings of Reed and Varghese (2007) which demonstrated that women serving on the forest sector advisory committees held greater affiliation for inherent values of forest than to men, while men preferred more utilitarian values. Hence, it appears that these orientations have not changed since the 2004 survey. However, determining the influence of these values in decisions would require a detailed analysis of decisions or recommendations.

The interview results also revealed that participants expressed their opinions mainly based on their professional background or experiences regardless of their gender. For example, one of the interviewees stated:

The values that they bring are the values that they have learned while they gathered up knowledge in their profession and they gathered up the skills afterwards practicing that profession. So, they are the values that are not gender-based, but are science based.
(Respondent #2, Male from Balanced FAC)

This finding seems to be consistent with an earlier observation, which showed that FACs place importance on the sector-based representation; hence, it seems possible that participants share the views of their representative sector/organizations that were irrelevant to their gender and their beliefs.

Nonetheless, these findings indicate that values women hold (whether as a result of their employment or their gender) are under-represented in committee deliberations. There is no doubt that women's perspectives can play a crucial role in the sustainability of the natural resources, the economy and the communities (Agrawal, 2001; Reed & Varghese, 2007; Arora-Jonsson,

2014). Given the significant differences expressed between women and men's value orientations, serious consideration of women's perspectives would provide recommendations to the forest companies to reduce timber harvesting and protect the inherent values of forest resources.

6.2.4 Decision Making

The survey results suggested consensus as the primary mechanism of decision making in the majority of the FACs. Furthermore, women rated more highly than men factors associated with feeling pressured to agree with committee decisions. These factors included 'group pressure', 'the complexity of the issue' and 'time constraints'. This finding was corroborated by some respondents in interviews. For example, one of the women respondents noted

They don't give us enough time. Well I think that a lot of the stuff needs to be done at a slower pace. A lot of stuff there is PUSH! PUSH!! PUSH!!! 'Let's get this through, let's get this done and whatever!' That is not how it should be done. There should be in depth study. There should be in depth conversation about it and everybody should have a right to speak up and say what they want to say. And I've been reprimanded many times because I'm kind of vocalizing some of the things that I think about and I've been reprimanded about it many times. (Respondent #4, Female from Balanced FAC)

A significant difference was observed between the responses of men and women for the factor 'group pressure'. It seems possible that when their proportional representation is low, women may be less assertive and more likely to agree with the decisions made by other members (especially large number of male members) though the decisions made might not be of their choice (Dahlerup 2006; Agarwal 2010b; Torchia et al. 2011). Research has also demonstrated that gender-based assumptions and prejudices restrict women's access to the decision-making positions which can impact on the types of decisions made (Varghese & Reed, 2012; EIGE, 2015).

Decision-making roles in the public domain have long been dominated by men. Furthermore, the behaviors and qualities required for leadership- such as firmness and dominance are often stereotypically associated with 'masculine' traits and hence generally associated with men (Padmasee, 2008). As a result, there is a tendency to expect leaders to be not only men, but also people who have these characteristics. The gendered expectation of women to

be caring and nurturing not only contradicts the anticipated leadership qualities, but also prevents women's ability to lead effectively and be promoted to decision-making positions (Eagly & Karau, 2002; Werhane & Painter-Morland 2011).

These kinds of gender-based stereotypes are evident in the Canadian labour force also, and are prominent in the forestry sector. For example, the findings from the study of women in leadership roles at TSX-listed companies in Canada by Andrew MacDougall in 2016 show that women are still underrepresented in high-earning leadership roles such as directors in many sectors (See Figure 6-2). As shown in the Figure 6-2, the forestry sector has the lowest proportion of women directors while the highest proportion were found in financial services. These statistics shows that men not only dominate but also constitute the majority of the top positions in the forestry sector. This study is also consistent with the previous findings from various studies which demonstrated that women in resource management organizations have little input in the decision-making process (Brasell-Jones, 1998; Sloan et al., 2004; Kafarowski, 2005; Natcher, 2013; Staples & Natcher, 2015).

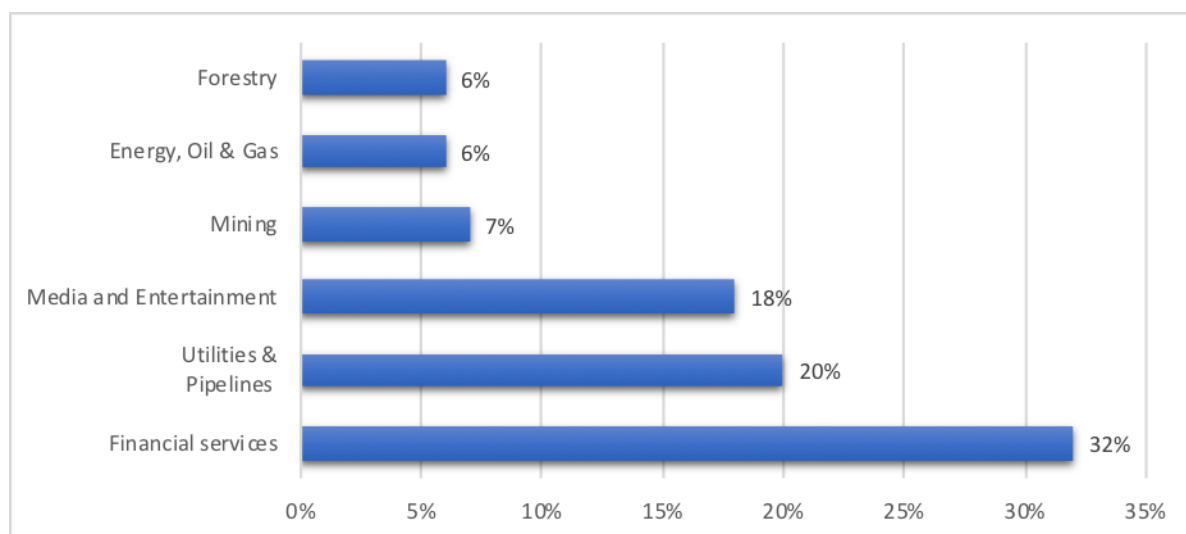


Figure 6-2. Industry breakdown of percentages of women directors at TSX-listed companies in 2015

To explore the foregoing issue further, interviewees were asked about the effects and consequences of under-representation of women on the types of decision or recommendations made by the committee. The majority of the respondents believed that gender-imbalance had no bearing on the decisions they made. However, one of the respondents believed that with male

dominance in the FACs “It's more a revenue-focused, emphasis in the operation of the committee without as much focus on the practical needs of the environment and others concerns, other than strictly money and revenue based”.

Even though the majority of the interviewees indicated that the number of women present did not affect the final decisions made, almost all respondents considered that with the presence of more women on the committee, there would be more emphasis on adopting sustainable forest management practices and taking more holistic decisions regarding the use of forest resources. One of the male interviewees noted “I assume that there would be a stronger focus on sustainability. I think that women do have more of the focus on perhaps the sustainability aspect of the forestry management.” Similarly, another male interviewee clearly stated that “women would bring just more diverse uses of the forestry resources than man. I believe that the women would emphasize the fact that the forest has more values than just being a wood resource.”

Furthermore, some of the interviewees highlighted the potential role of women to enhance more an optimistic institutional culture in the committees. One of the female interviewees suggested:

I think women have different ways for communication and a different way of approaching things. So, it would change the communication dynamic. Maybe we'll change some of the presentations we see. They would just bring different viewpoints.
(Respondent #16, Female from Balanced FAC)

These findings are consistent with other studies which demonstrated that gender-balanced workplaces are more effective and function well (Andrew MacDougall, 2016). In addition, women's positive attitudes and qualities such as problem solving, communication ability, adaptability and team working are immensely advantageous to workplaces. These skills can counter-balance the conventional masculine skills such as assertiveness, dominance and independence, and contribute to more flexibility and responsiveness in the working environment (Lidestav, 2006).

Despite the optimistic opinions on the qualities women could bring to the committees, the majority of the interviewees believed that the final outcome/decision would not be affected by the number of women present on the committee. One of the interviewees noted:

I wouldn't think it would really change the outcome that much. More women might change the nature of the discussion slightly but the outcome... I think because we arrive by consensus, I don't think it would change the outcome that much. (Respondent #27, Male from Unbalanced FAC)

Another male respondent clearly stated:

It doesn't matter who comes into the room we are gonna encourage them to provide their knowledge, their experience, their wisdom in addressing the interest, needs and issues that might be raised in the meeting and so yeah it doesn't matter. Everybody is encouraged and if more women are participating I think it would be business as usual and I think it would be open, it would be inclusive and it would be supportive. (Respondent #24, Male from Balanced FAC)

All these mixed opinions suggest that women's potential contributions are often being overlooked in the FACs.

The interview results also revealed that some members on the committee participate more than others in the discussions mainly based on their role in the committee, years served on the committee (newness), their expertise, and personal attributes. One of the male respondents highlighted

Some people definitely take part more than others. Some are more listening and learning. A lot of the meetings is about information sharing, so some people only speak up to ask questions or when their particular field of expertise comes in... Definitely there are some people that speak often; I would say that it's both men and women that are in both of those camps. Nobody gets shut down in what they are saying. Everybody has an opportunity to talk but some people use that opportunity more frequently for sure. (Respondent #27, Male from Unbalanced FAC)

This quotation suggests that although all members do not participate equally, opportunities exist to express divergent views; however, it is necessary to understand how the views are valued by the participants. Regarding expertise, how do people determine what is expertise and what expertise is valued? For example, one of the men spoke about “science” as the key value. But if a

woman started to discuss the “intrinsic value of nature”, would this be considered “an area of expertise”? Or would she be considered simply to be a tree-hugger? it’s more than just ‘bodies’ – men or women – but how what they ‘represent’ is gendered and considered. Furthermore, the issue about ‘newness’ may also be a reason why women are not as effective participants if men have been more likely to be on those committees for a long time and they are familiar with the issues and with other members.

Interestingly, almost all the interviewees suggested that women participated equally in the committee discussions and decision-making processes. Even female interviewees belonging to unbalanced FACs described their experiences positively. This may, in part, account to their influential roles (e.g., facilitator, chairperson) and their long-term involvement on FACs. However, as described in Chapter 2 studies have shown that poor representation of women (below desired critical mass) might prevent women’s effective participation in decision-making processes. One of the female interviewees noted:

Well, men have their own ideas on how things should be done and we have our own ideas on how things should be done. And if you don't have any women representation... you're outnumbered. Even though everything is by consensus, you're still outnumbered.
(Respondent #4, Female from Balanced FAC)

Her observation is supported by on-going research suggesting that women are more likely to be effective participants when there is a sufficient number of women in the meetings (Reed & Varghese, 2007; Agarwal, 2010b; Varghese & Reed, 2012).

Not a single interviewee suggested gender as a barrier to participate on the discussions and decision-making. However, there was one female interviewee who stressed that even though women were provided with equal opportunities to speak their opinions, they could not be assured that their viewpoints would be seriously considered when decisions or recommendations were being made. Studies have also revealed that women have to repeatedly put forward their views to be heard whereas, men are assumed to already have the abilities or knowledges (Murray, 2014).

Both men and women interviewed considered the role of facilitators or chairs crucial to provide equal opportunities for members to share their views during the discussions and decision-making at the meetings. One of the female interviewees noted “The facilitator is very good at making sure that everyone who wants to speak can. That everyone understands. She is

always very careful to make sure that no one uses jargon or acronyms and she looks for nudges that everyone understands and everyone is happy with what has been decided or what's going forward". However, 2016 chairpersons' survey revealed that there were facilitators mainly in FACs surveyed in the Atlantic region and British Columbia only; the majority of committees in Ontario, Quebec and Alberta do not have a facilitator. This finding suggests a need to have an independent skilled facilitator to run FACs' meetings for a 'fair and effective participation' of the committee members in decision making. This might include addressing some of the challenges raised by interviewees relating to pressure to arrive at consensus, being heard, and proper utilization of time available.

6.2.5 Satisfaction and Experiences of Working on the Committee

Both the survey and interview results showed that the levels of satisfaction among men and women on the committees were relatively high, which is encouraging. These results agree with the findings of Hunt (2015) who studied Ontario's FACs and suggested that on average the members of advisory committees were satisfied and held optimistic attitudes towards the committee's process. In this study, the majority of the interviewees had positive experiences being on the committee and believed that they had accomplished their objectives being members of the committees. One of the interviewees had clearly stated "I wouldn't be there after twenty-five years if I think it wasn't doing some good. So, I'm quite satisfied that our input is valuable." These positive responses, in part, can be attributed to the longer association of respondents with the committee and likely participation of members in both the survey and interviews who were relatively more satisfied with the committee's work.

Survey results revealed that men were more likely to be content with all the aspects of committee's work as compared to women for both 2004 and 2016 surveys. Furthermore, in terms of committees' activities, women were likely to rate slightly lower than men on the statement "I am able to influence the decisions that are made by the committee". It is in line with earlier studies that have shown that a certain proportion of women's share (in decision-making positions) such as critical mass (at least 30%), gender balance (40/60) and gender parity (50/50) is necessary to make a difference and bring significant change (Dahlerup, 2006). Given the poor representation of women, (below critical mass) their interest might be overlooked and hence, they might feel less able to influence committee decisions. Similarly, women rated more highly

on the statement “time is poorly spent in the process.” It seems likely that considering their many other commitments, women may be more cautious of wasting time in the meetings. This concern might impact on women’s attendance in the committee meetings.

Some of the reasons expressed by the less-satisfied interviewees were the lack of committees’ influence in the final outcomes, less responsive collaboration between forest companies and FACs, and treating FACs (by the forest companies or government agencies) mainly as information-sharing platforms rather than the advice-giving committees. One of the male interviewees stated “I don't think the company has utilized us in the best way. It has gone to more on more of just informing to us, the public, what they are doing. And they could actually utilize us better if they would change the focus into seeking advice and actually using us to form their opinion on how they operate.” As recommendations provided by FACs are not binding, the results may suggest some ambiguity on the members’ understanding of the committee’s purpose and capacity. Further studies would be required to evaluate how forest companies and provincial agencies take on the recommendations provided by the FACs in their final decision-making.

6.3 Incentives for Creating Diverse and Effective FACs

This section explains diversity and the strategies for improving the diversity of FACs, based on the responses from both the survey and interviews. Lastly, it discusses the effectiveness of FACs and approaches to improve their effectiveness.

6.3.1 Diversity in FACs

A broad range of interests and viewpoints is needed for informed decision making (Diaz, 2005). The definition of ‘board diversity’ provided by the Canadian Board Diversity Council (CBDC) is comprised of industry experience, management experience, education, functional area of expertise, geography and age along with factors such as gender, ethnicity, Aboriginal status, disability and sexual orientation (CBDC, 2016). Similarly, CCFM also stated that “decision-makers should try to involve the public in the decision-making process in order to effectively incorporate the full range of social values into decisions and to be responsive to changes in values over time” (CCFM, 2003, p. 19).

The findings of this research suggest that lack of diversity generally persists in 2016. Although committee members acknowledge the benefits of diversity in FACs, there is a

challenge to incorporate a wide range of public interests in one platform especially women, Indigenous people and youth. Possible explanations for this situation may be the lack of adequate incentives to attract such groups and they are too busy to spend their volunteer time on forestry issues.

Incentives to improve diversity in FACs

Given the imbalance on FACs according to gender, Indigenous representation and youth, I consider possible incentives to improve diversity. In terms of gender diversity, positive measures such as quotas or targets might help to reduce gender-gap in FACs, as can be witnessed in the political sphere worldwide (Dahlerup, 2005). However, just increasing the number of women to provide for equal representation in numbers does not necessarily solve the problem. Women's access to the power structure and decision-making positions is crucial for substantive transformation to happen (EIGE, 2005). Women's effective participation is often hindered by the factors such as persistence of gender-based stereotypes and institutional culture (Andrew MacDougall, 2016). To break the impact of outmoded stereotypes, changes in attitudes and behaviors at home and at the workplace are fundamental (EIGE, 2005). Furthermore, recognizing and challenging assumptions and subtle forms of discrimination (e.g., expertise women hold relates to soft skills, and women are only heard when they speak like men) are important to break these stereotypes and make progress towards gender equity.

Considering family obligations as one of the major reasons limiting women from joining the committee, the provision of some kinds of reimbursement or arrangement of child care facilities during the committee meetings may help to retain women on the FACs. This will in turn positively impact to attract more women to join the FACs. However, implementation of family-friendly policies that support an even distribution of child-caring and household duties among men and women is also necessary for the significant changes to occur (EIGE, 2005).

Another factor that prevented some women from participating on the committees was time and place of the meetings. Scheduling of the committee meetings at a time and venue that are more suitable for female members to attend might encourage their participation on FACs. It is likely that women will participate more effectively and contribute more in the discussions at the meetings, when they need not worry about rushing back home.

Some of measures to attract more women into FACs may include:

- Proactive approaches to promote activities of FACs- it may help to make the public more aware about FACs and to attract interested women to the FACs.
- Reviewing committee membership time to time and to provide opportunities for women to join the FACs during new recruitment. Perhaps this includes limiting the length of service so that committee membership can be refreshed.
- Building a women's network (e.g. of women foresters) - This kind of network can help to reveal that forestry is not only a 'men's domain' and can help to attract more women into considering forestry as a career option. Increasing women's engagement in forestry work or forest-related participation opportunities may also improve women's representation in FACs.
- Broadening the scope (or interest area) of FACs may also help to improve representation of women. For example, if FACs to secure public awareness and involvement, it may not be necessary that all that most participants be drawn from forestry or land-based activities.

In the case of Indigenous members, a number of interviewees suggested that more regularly requesting them to join the committees, inviting them to attend regular meetings, and trying to understand and address their concerns might help to improve their participation on FACs. One of the reasons identified for sporadic attendance of Indigenous members was that they live far from the meeting place so travelling of a long distance in the evening might also have affected their participation. This finding corroborates with Robson and Rosenthal's (2014) finding who studied effectiveness of FACs in forest management planning in Ontario. Providing accommodation to the Indigenous members who live farther from the meeting venue or, alternatively, hosting meetings in Indigenous communities might also help to improve their participation. Additionally, increasing awareness of Indigenous issues and peoples in the region on the part of participants and working to identify appropriate protocols and ways to work together may also be appropriate strategies. Building relationships with local Indigenous peoples first before asking them to get involved might be a long-term initiative.

Notwithstanding these suggestions, Indigenous peoples may not find value in the FAC structure as a means to become engaged in SFM. The history of colonization and dispossession of land by Canadian authorities has left deep-rooted mistrust of existing institutions and has sparked renewed efforts by Indigenous peoples to reclaim their rightful place in environmental

governance. Hence, FACs may never be sufficient or appropriate mechanisms for meaningful engagement of Indigenous peoples in forest management decision-making.

6.3.2 Effectiveness of FACs

The CCFM stated that the indicator “fair and effective decision-making” is measured, in part, by “the proportion of participants who are satisfied with public involvement processes in forest management in Canada” (CCFM, 2005, p. 130). Although the majority of the survey participants and interviewees suggested that their FACs were effective, there were some process evaluation criteria that the majority of FACs respondents noted had not been met, such as representativeness, ongoing involvement, skilled facilitation, and accountability and transparency. Related to ‘representativeness’, the study showed that there was a very low representation of women, Indigenous people and youth on the FACs surveyed. Regarding ‘ongoing involvement’, chairpersons indicated that the composition of FACs have not changed for the past three years in 81% of the FACs (n=42). This finding was in line with the findings from the interview where several interviewees have suggested that their committees’ composition have not changed very much after their formation. About 68% of the surveyed FACs (n=66) do not have an independent ‘facilitator’ to run the meetings.

While assessing accountability, the study showed that in only 38.7% of FACs, 80-100% members attended the committee meetings. Further, the 2016 member’s survey results (n=343) showed that only about 39% of respondents ‘often’ updated their representative organizations about the activities of the FACs. To add, women participants were more likely to report being accountable to their representative organization than men. This is in line with the finding that women mainly participate on FACs as part of their job and it seems possible that they were required to update their representative organizations after they attend meetings (as compared to men who joined the committees for different reasons).

Overall, these findings show that the FACs need to address many aspects of committee processes to attain a higher level of effectiveness. Giving recognition to recommendations provided by FACs, providing some kinds of compensation for service, and broadening the representation of interests might help government and industry sponsors to improve the diversity and effectiveness of FACs in the long run.

6.4 Summary

The evaluation of Canadian FACs revealed that they generally represented narrow range of public interests. The interests of women, Indigenous people, and youth were particularly underrepresented. Although the information that poor representation of women on FACs was not new (Parkins et al., 2006; Reed & Varghese, 2007; Richardson et al., 2010; Hunt, 2015), it is concerning that these FACs have done little over the last 12 years to address nominal and effective participation of women and other social groups. Although Canadian women do not depend on forest resources as women in the global South do for their livelihood, this research reinforced the finding that they hold different perspectives about forest values than men. Therefore, women's active participation in providing recommendations on forest management might reinforce sustainable use of forest resources.

The FACs remain primarily composed of elites and older members. Having experienced and knowledgeable members on the committees is a positive thing; however, committees can stagnate if they do not get new ideas and it will be difficult to attract new and young members in the committees if their membership continues for a long period of time. Unless some strategies to attract women, Indigenous people and youth are pursued, it is likely that FACs will continue to become older and function as usual. In general, the findings of this study raised questions about whether these FACs will improve the existing scenario if they have not changed much since 2004 and what is the incentive to make change? Alternatively, one might ask is it time to look for other alternative public engagement forums in forest management by relevant authorities?

The next chapter will summarize the overall findings of this thesis, provide recommendations, and identify research areas that need further investigation.

CHAPTER 7

CONCLUSION AND RECOMMENDATIONS

Although government agencies and private industries/companies adopt various methods of public participation in resource and environmental governance, the public advisory committee is a commonly-used approach in resource planning process within Canada. These public advisory committees have been used extensively in the forest management planning process by the forest companies and the government bodies responsible for managing country's forest resources (Parkins et al., 2006). The forest-sector advisory committee provides a potentially suitable platform for men and women to share their perspectives and values, and have dialogues to reach a consensus on recommendations to be provided to committee sponsors (mainly forest companies and provincial agencies). However, a national survey of these FACs conducted in 2004 revealed that these committees were highly male-dominated with a very poor representation of women on the committees (Parkins et al., 2006). The 2004 survey results also revealed that there were gender-differences in relation to the access, values represented and experiences of men and women participating on these committees (Reed & Varghese, 2007). So, as a follow-up, this study was designed to evaluate the changes that have occurred in representativeness and deliberative processes since 2004.

The first objective of this research was to compare women's and men's past and current experiences of participating in forest-sector public advisory committees. The results revealed that the majority of the 2004 and 2016 surveys' respondents and 2016 interviewees had positive experiences of participating on the FACs. However, in both 2004 and 2016, female respondents were less content than male respondents in some aspects of committee process such as an ability to influence the decision-making process, and the opportunity provided to raise the concerns in committee discussions.

The second objective of this research was to compare changes in representation, perspectives and values represented, satisfaction and influence for men and women participating in public advisory committees since 2004. The results revealed that there was a slight increase in the proportion of women respondents, respondents who identified themselves as Indigenous people, and average age of the respondents since 2004. Likewise, there was an increase in the proportion of respondents who believed their committees represent the values of all interested groups, who reported that they clearly understand their committee purpose, and who were

satisfied with different committee activities/aspects since 2004. It was noted that men were more likely than women: to believe that their FACs represented values of all interested, to clearly understand committee purpose, and to be satisfied with all the aspects of committee's work across the years. Nonetheless, there was a consistency in relation to the reasons given by men and women related to why they participate, and the values they represented over the past 12 years. The male respondents were more likely than female respondents to participate on the FACs to ensure that recreational opportunities were not reduced, while female respondents were more likely than males to participate as they were required to attend as part of their job. Parkins et al. 2006 found the same motivations. In terms of forest values, the survey results revealed that women continued to place greater emphasis on the intrinsic values than men; on the other hand, men continued to favour utilitarian values. This finding was in line with the findings from the interviews where majority of the interviewees (both men and women) had acknowledged that women had brought perspectives mainly on the aesthetic values of the forest resources. Regarding the influence of different actors in setting the agenda for the meetings, both the survey results revealed that female respondents perceived industry officials as the most influential actors while male respondents reported 'the participants themselves' and 'the facilitator' as the most influential ones for the 2004 and 2016 surveys, respectively.

The third objective of this research was to explore the nominal and effective participation of women and men in public advisory committees. The survey results revealed that there was an increase of only 2% of women respondents since 2004 and women represented less than 21% in the 2016 survey. This shows that the balancing of gender in FACs has not been considered in initial composition or in recruitment of new members. Hence, the proportion of women was below a desired critical mass (at least 30%) in FACs surveyed. Further analysis revealed that a male-dominance in forestry employment or forestry-related sectors, and the assumed social and family obligations of women as primary care-givers were likely the most important factors contributing to the poor representation of women on these committees. These findings also suggest that the gendered division of labour in rural areas (where men work in the industry and women are responsible for care giving in the home) remains strong and, the prevalence of gender-based stereotypes has hindered women's effective participation on the FACs. Even though the majority of interviewees suggested that women participate equally in the discussions and decision-making process, there remains a question of their influence in decisions made.

Results of both surveys revealed that women were more likely than men to agree that committee decisions were subject to group pressure and women were more likely than men to rate lower on their ability to influence the decisions that are made by the committee. Overall, these findings suggest that women do not have a sufficient place and a voice at the table to influence the recommendations made by the FACs. So, it can be said that the FACs surveyed offered little opportunity for the both nominal and effective participation of women.

The fourth objective of this research was to determine incentives and obstacles for creating diverse and effective public advisory committees. The results revealed that gender imbalance and lack of diversity generally persist in 2016. Only a narrow range of views are incorporated on FACs with very poor representation of women, Indigenous group and youth. In terms of effectiveness, although majority of survey and interview respondents believed their FACs were effective, there were several measures suggested for the improvement.

To improve diversity of committee membership and improve effectiveness, I make the following recommendations:

- Provide greater logistical support for committee members to participate. This may include (but is not limited to):
 - providing a travel allowance for people attending a long distance
 - rotating the location of meetings so that they are more readily accessible to some members
 - providing support for childcare (e.g., compensation or childcare opportunities on site)
 - providing a stipend for loss of income (where relevant)
 - altering the timing of meetings to maximize availability of a broad range of participants
- Make provisions to attract and retain youth members on the committees.
 - recruit students from local high schools, colleges, or universities (where applicable)
 - seek out opportunities for work-study or internships with youth
- Seek partnerships with post-secondary institutions who can promote forestry as a career option among women.

- Draw attention to the work of FACs for the general public so that people become aware of FACs' existence and contributions to the management of forest resources.
 - make people aware of meeting times and locations
 - provide minutes in a publicly-accessible place (e.g., committee website, social media)
 - host an open house or an event once a year (e.g., forest tour) to promote their work, and any other contributions (e.g., reports)
- Increase the frequency of turnover and recruitment. Recruitment efforts should target women, youth and other marginalized groups.
- Encourage broad use of a skilled facilitator to ensure efficient, fair, and effective meetings.
- Ensure FACs are provided with sufficient time and resources to make appropriate recommendations. Resources may include meetings with external experts, Indigenous knowledge keepers and representatives from environmental or social organizations who are less-well represented to ensure that their perspectives are understood and considered.

7.1 Significance

Canada's jurisdictions encourage public participation in the decision-making process to incorporate the local values and perspectives of forest stakeholders. This study has contributed to understanding if the expectations of the participants involved in the participatory processes for SFM have been met. Furthermore, this study is one of few that has researched the relationship between gender and natural resource management in the context of Canada. The results of this study will help to understand the gender-differences in relation to roles, perspectives and overall participation of men and women in FACs and its impact on the final decisions made or outcomes. This follow-up study of FACs also demonstrates if there has been any improvement in gender representation since 2004. For these reasons, this research has helped to determine if Canada is moving ahead in achieving 'society's responsibility' for SFM.

In addition, this study will benefit participants of FACs by identifying and addressing barriers to participation that members may experience and offers the opportunity to benefit

forest-based communities and community participants. Methodologically, examining and comparing national-level data sets provides an overview of practice that complement results from individual case studies (e.g., McGurk et al., 2006). By providing insight related to the evolution and contributions of public and stakeholder participation in the country's evolving forestry sector, the aggregate results from this research may contribute to improved decision-making, with positive implications for social and ecological sustainability.

7.2 Limitations

One of the limitations of this research was the low response rate from the 2016 survey compared to 2004. Of 132 FACs identified, 79 agreed to participate in the survey. However, the questionnaires were sent to all the FACs identified, without knowing their status, such as whether they were functional at the survey time or not. It was only after analyzing the possible reasons for lower response rate, that it was suspected that some of the FACs were not functional at all. Besides that, there were not any incentives provided which could have encouraged more participation of FACs chairs and members in the survey. Hence, given a lower response rate of the survey, and the lack of a known 'n', the survey results do not completely provide the statistics of the country and the findings cannot be generalized to the whole population; however, the results from different groups can be compared from within the survey.

Only 21 advisory committees participated in both the 2004 and 2016 surveys. Due to the involvement of different participants small the sample size in the 2016 survey, for both chairs and members, a statistical comparative analysis of the two sets of data was not possible. This constrained the ability to draw more general conclusions about the changes that have occurred across the years.

Another limitation of this research is that the national survey does not include former committee members who left FACs due to dissatisfaction. So, their opinions about effectiveness of FACs were not captured and the views expressed by respondents may be from the members who were relatively more content with the existing processes.

Furthermore, interviews were conducted with a limited number of committees. Hence, the viewpoints and experiences shared only reflect a portion of the FAC members. All the interviews were conducted over phone due to travel and time constraints; it was not possible to observe interviewees expressions or gestures to analyze their responses more critically.

Telephone interviews also limited the ability to establish rapport, elaborate, and clarify responses. However, telephones allowed interviewees to feel relaxed and accessible and provided the opportunity to access a wider range of committee members than might have been the case with in-person interviews.

7.3 Future Research

This study mainly compared changes (through national surveys and interviews) in relation to: the access, values and experiences of men and women participating on the FACs since 2004, and the effectiveness of FACs in achieving ‘social dimensions’ of SFM (from the perspectives of FAC’s participants). However, there remains some areas which need further research. One of the areas is evaluating effectiveness of FACs in contributing to SFM from the perspectives of sponsors (e.g., assessment of outcomes of FACs). This type of research would also assess how recommendations provided by the FACs are incorporated in the forest management planning process by the forest industries/government agencies. Another possible area for further research is an evaluation of recommendations that are favoured/supported by men and women regarding the management/utilization of forest resources. Both the national surveys of 2004 and 2016, and interviews of 2016 and studies elsewhere have revealed that women are more likely than men to support intrinsic/aesthetic values over the economic/utilitarian values of the forest resources. Whether these values get translated into specific recommendations would help reveal the significance of gender in the operations and outcomes of committee deliberations.

It can be concluded that the representation of gender, perspectives and values on committees and the committee process and deliberations have remained relatively consistent over the past 12 years, with some regional variation. The study revealed that men continued to favour the utilitarian values of forest resources whereas, women favoured the intrinsic values of forest resources. Neglecting the gender imbalance in these advisory committees and disregarding the gender differences in the values they held for forests will likely impact the types of recommendations provided (in favour of timber extraction) and consequently in the policy formulation. Hence, women’s effective participation in forest management will likely aid in achieving the sustainable forest management goals.

Although the committee members recognized the benefits of diversity on FACs, committees have not made significant changes to their structures or processes to address gender imbalance or to make the committee processes more welcoming to different perspectives. To address gender imbalance, it is important to note that simply increasing the number of women in the FACs for the purpose of achieving gender balance will not necessarily achieve gender equality. This is not to say that having more women on the committees is not significant; however, it is necessary for FACs to structure new recruitment opportunities, address stereotypes about expertise and voice, and to establish mechanisms for women to be heard for their effective participation. Moreover, the research findings suggest that FACs need to address several aspects of committee process and deliberations (such as recruitment, compensation, skilled facilitation, accountability, and transparency) to be effective in achieving the ‘social dimensions’ of SFM.

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APPENDIX A

Context: Forestry in Canada

The productive or commercial forests cover 234.5 million hectares (ha), 0.4% of which is harvested annually (NRC, 2016). The forested areas managed for timber production are usually found in the Boreal Shield, Atlantic Maritime, Montane Cordillera and Pacific Maritime eco-zones (see Figure A-1). Most forests in Canada are comparatively slow-growing; however, some are very productive. Several factors, such as climate, soil, tree health, and tree age, determine the tree growth rates. The fastest-growing and oldest trees are found in the Pacific Maritime eco-zone along the coast of British Columbia, where the average wood volume is 432 cubic meters/hectare (m^3/ha) (NRC, 2016). This wood volume is three times greater than the national average of $136 \text{ m}^3/\text{ha}$. For example, high-value, large-diameter trees such as western red cedar are located on the country's Pacific coast. These types of trees are cut in a very selective manner and are costly to harvest as well. On the other hand, the slowest-growing forests are in the Hudson Plains eco-zone, where the average wood volume is $36 \text{ m}^3/\text{ha}$, which is about four times below the national average (NRC, 2016). Figure A-2 shows the dominant tree species across Canada.

Canadian forests provide significant commercial benefits, such as timber, non-timber forest products, recreation, and service-based industries, all of which are valuable both nationally and internationally. There are three major forest-based industries in Canada: solid wood product manufacturing, pulp and paper product manufacturing, and forestry and logging. Worldwide, Canada tops the list for being the biggest producer of newsprint and northern bleached softwood kraft pulp, and the second-largest producer of softwood lumber (NRC, 2016). The forest industry has contributed \$ 23.1 billion (1.2%) to the country's gross domestic product in 2016, as shown in Figure A-3 (NRC, 2016). It is interesting to note that the forest industry reduced direct carbon emissions by 44% between the years 2000 and 2013 by significantly lowering the use of fossil fuels (NRC, 2016).

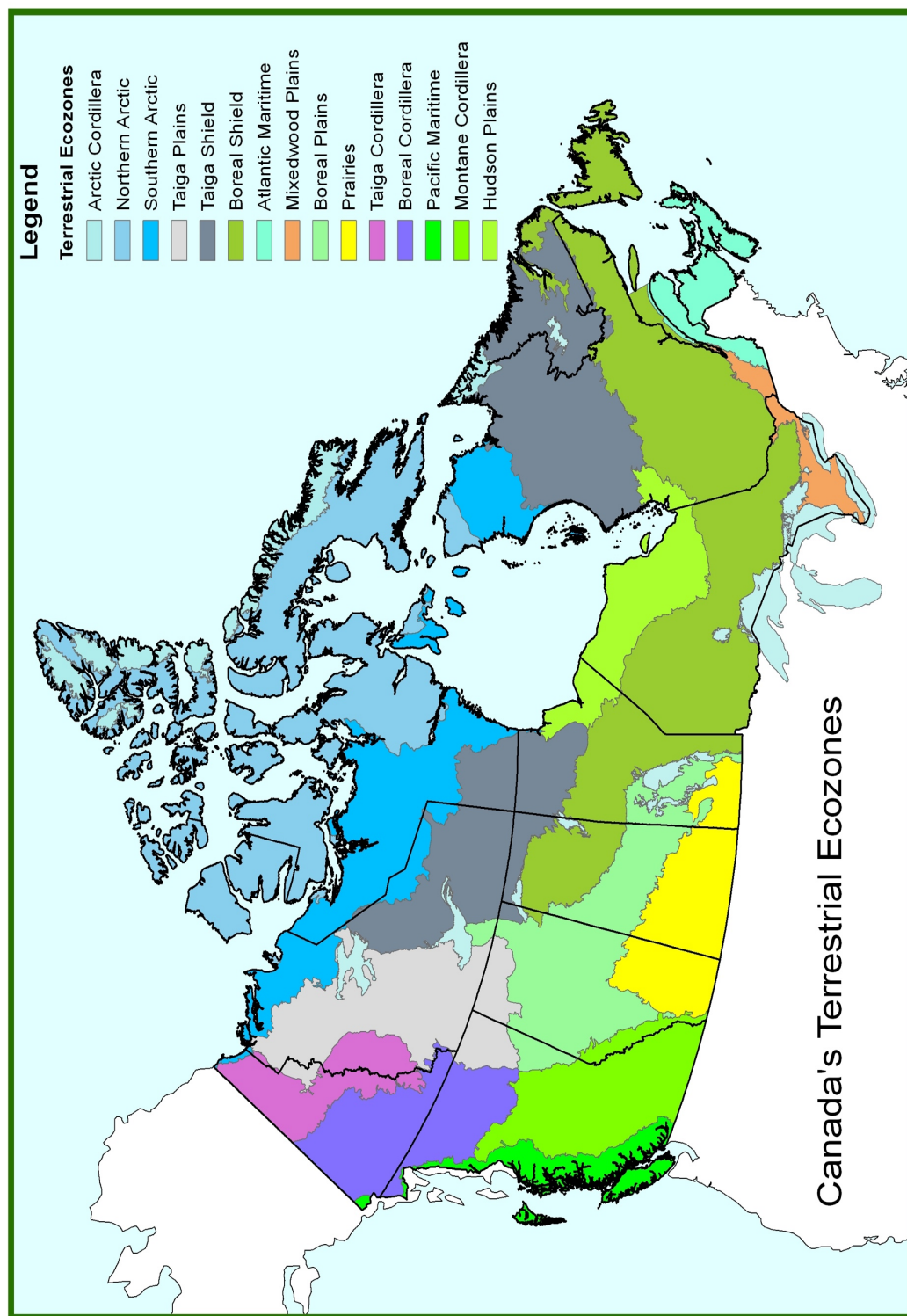


Figure A-1. Canada's terrestrial eco-zones (Natural Resources Canada, 2016)

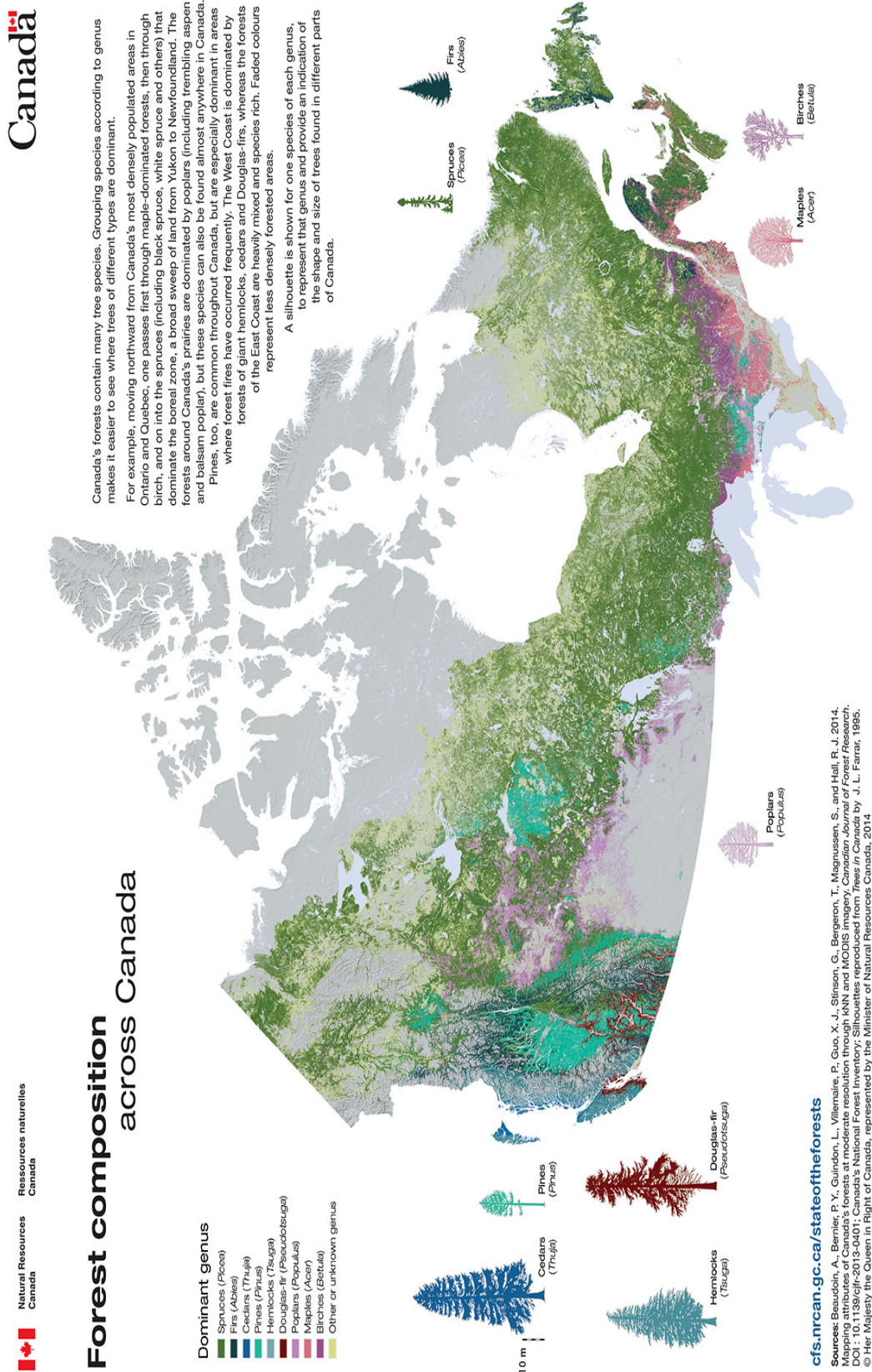


Figure A-2. Forest composition across Canada (Source: Natural Resources Canada, 2016)

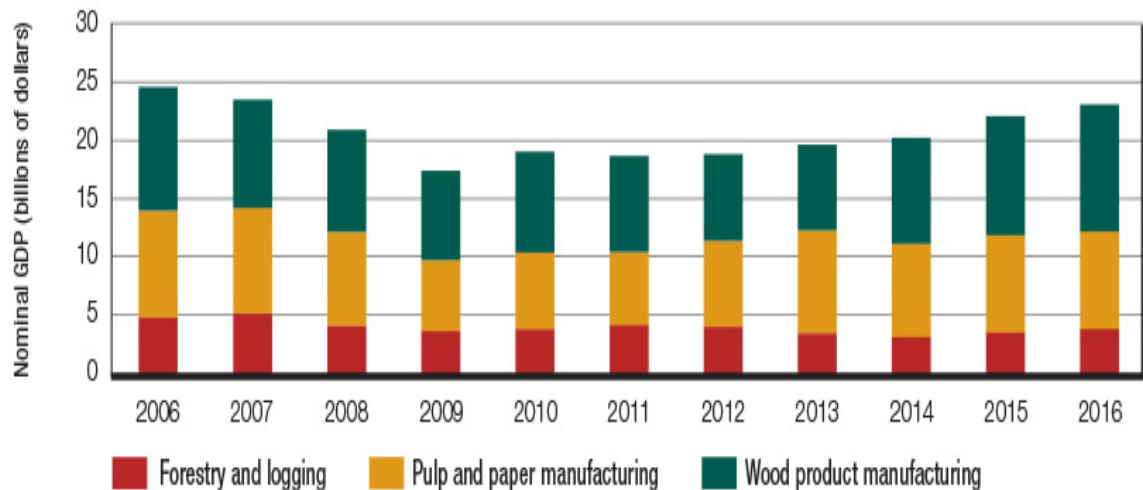


Figure A-3. Canadian forest industry's GDP, 2006-2016 (Source: Natural Resources Canada, 2016).

The largest market for Canadian forest products has long been the United States (U.S.). Hence, fluctuations in economic circumstances in the U.S. have an impact on the exports of Canadian forest products. The recession of 2007-2009 in the U.S. and the associated crash in the housing market there, together with the worldwide economic crisis, significantly impacted Canadian forestry production (NRC, 2017). This led Canadian producers to increase the exports to other possible global markets, mainly in Asia (such as China and Japan).

The regulation of harvest levels is vital in the design and implementation of forest management plans (CCFM, 2005). To ensure that Annual Allowable Cuts (AAC) are not exceeded, provincial law requires the reporting of harvest levels. These AACs are set over multi-year regulation periods (five to ten years), depending on the provincial legislation that regulates harvesting processes in that region (National Forestry Database [NFD], 2015). Although there is no AAC estimated for Canada, the National Forestry Database (NFD) indicates that between 1990 and 2015, the total of AACs across Canada was fairly constant (see Figure A-4). Approximately, two-thirds of this AAC was harvested in 2014 (NFD, 2015). The statistics show that over the regulation period, annual harvest levels were lower than the aggregate Canadian AAC for both hardwoods and softwoods. Hence, the federal government concludes that Canada harvested at a sustainable rate throughout the period (NFD, 2015).

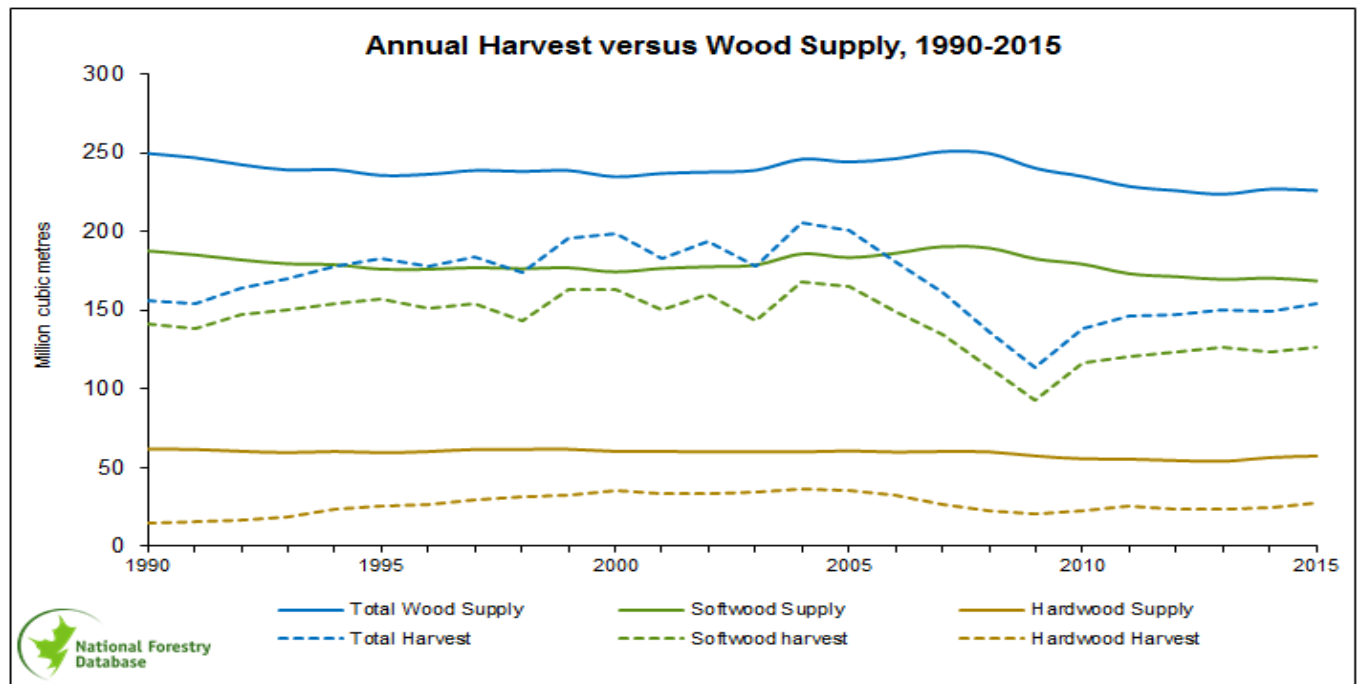


Figure A-4. Annual harvest versus wood supply, 1990-2015 (Source: National Forestry Database,

APPENDIX B

Survey Questionnaires



Natural Resources
Canada
Canadian Forest
Service

Ressources naturelles
Canada
Service canadien
des forêts



UNIVERSITY OF ALBERTA
DEPARTMENT OF RESOURCE ECONOMICS
AND ENVIRONMENTAL SOCIOLOGY



UNIVERSITY
OF MANITOBA

The Role of Public Participation in Collaborative Forest Governance in Canada

The following questionnaire concerns your perspective as Chair of a forest-sector advisory committee in Canada. It forms part of a larger study, funded by the Social Sciences and Humanities Research Council (SSHRC), which investigates the changing nature of forest governance in Canada, and whether current arrangements are well placed to assist the country's forest-based communities during times of environmental, social and economic transition. The research has the potential to benefit participants through identifying and disseminating strategies being used for effective governance. The aggregate results from this study will inform policy and practice in support of Canadian forest-based communities.

People involved in this research are: Dr. Maureen Reed (University of Saskatchewan), Dr. John Parkins (University of Alberta), Dr. John Sinclair (University of Manitoba), Dr. Solange Nadeau (Natural Resources Canada), Dr. Sara Teitelbaum (University of Montreal), and Dr. James Robson (University of Manitoba). If you would like to know more about this research, please contact one of the following research team members:

Principal Investigator Maureen Reed, Professor and Assistant Director Academic, School of Environment & Sustainability, University of Saskatchewan, 328 Kirk Hall, 117 Science Place, Saskatoon, SK, S7N 5C8, Tel (306) 966-5630, e-mail: maureen.reed@usask.ca

Co-investigator Solange Nadeau, Senior Forest Sociologist, Canadian Forest Service-Natural Resources Canada, Laurentian Forestry Centre, 1055 Du P.E.P.S. Street, Québec, Quebec, G1V 4C7, Tel.: (418) 648-5835, email: solange.nadeau@canada.ca

Research Associate James Robson, Natural Resources Institute, University of Manitoba, Winnipeg, Manitoba Tel: (204) 474-8374, james.robson@umanitoba.ca

**Ethics: A National Survey of Forest-sector Advisory Committees
(CHAIRPERSONS QUESTIONNAIRE)**

Participation in this research is voluntary. Please note that the data will be collected anonymously. Any personal data (i.e. gender, age, and ethnicity) will not be used or published in a way that risks your identification.

This research project has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office (Email: ethics.office@usask.ca, Tel: (306) 966-2975). Out of town participants may call toll free (888) 966-2975.

For more information about this study, please contact Principal Investigator, Dr. Maureen Reed, School of Environment and Sustainability (SENS), University of Saskatchewan (Email: maureen.reed@usask.ca, Tel: 1 (306) 966-5630) or Dr. James Robson, Natural Resources Institute, University of Manitoba (Email: james.robson@umanitoba.ca, Tel: 1 (204) 474-8954)

By completing and submitting the questionnaire, YOUR FREE AND INFORMED CONSENT IS IMPLIED and indicates that you understand the above conditions of participation in this study. This questionnaire is expected to take 25-30 minutes to complete.

Q1 What is the name of the advisory committee that you chair? Type your answer in the space below.

Q2 Where does the committee meet? Type your answers in the spaces below.

Town/city:

Province:

Other, please specify:

Q3 How long has the committee been in existence?

Years:

Q4 Does the committee have a sponsoring agency?

☐ Yes

☐ No

☐ Other, please specify: _____

If 'Yes' Is Selected

Q4A You indicated the committee has a sponsoring agency. Please indicate who the sponsoring agency is:

☐ Forest company/enterprise (1)

☐ Local industry (not forestry) (2)

☐ The provincial government (3)

☐ Local community (4)

☐ A municipal government (5)

☐ Indigenous government / organization (6)

☐ Community or social service organization (7)

☐ Other, please specify: (8) _____

Q5 Which of the following organizations and individuals are represented on the committee? Please check all applicable boxes.

☐ Forest company/enterprise (1)

☐ Local industry (not forestry) (2)

☐ The provincial government (3)

☐ Local community (individuals) (4)

☐ Local community (organizations) (5)

☐ A municipal government (6)

☐ Indigenous government / organization (7)

☐ Recreational organizations (8)

☐ Environmental organizations (9)

☐ Educational organizations (10)

☐ Community or social service organizations (11)

☐ Other, please specify: (12) _____

☐ Other, please specify: (13) _____

Q6 Briefly, what is the committee's purpose? Type your answer in the space below.

Q7 In your opinion, what are the most important issues that the committee has pursued or deliberated upon over the past 3 years? Type your answer in the space below.

Q8 In your meetings, do you have a facilitator who runs the committee's meetings independent of the Chair?

- ☐ Yes
- ☐ No

If 'Yes' Is Selected

Q8A What is the facilitator's background? Please select all applicable options.

- ☐ An independent professional facilitator (1)
- ☐ A representative from forest industry (2)
- ☐ A representative from local industry (not forestry) (3)
- ☐ A provincial government representative (4)
- ☐ A municipal government representative (5)
- ☐ An Indigenous leader (6)
- ☐ A business leader (7)
- ☐ An academic (8)
- ☐ A government forestry scientist (9)
- ☐ An independent professional forester (10)
- ☐ A representative of a community or social service organization (11)
- ☐ Other, please specify: (12) _____

Q9 How long have you been Chair? Please select or complete from the options below.

- ☐ Less than one year
- ☐ OR
- ☐ Years: _____

Q10 What is your professional background/affiliation? Please select all applicable options.

- ☐ A representative from local industry (not forestry) (1)
- ☐ A provincial government representative (2)
- ☐ A municipal government representative (3)
- ☐ An Indigenous leader (4)
- ☐ A business leader (5)
- ☐ An academic (6)
- ☐ A forest company representative (7)
- ☐ A government forestry scientist (8)
- ☐ An independent professional forester (9)
- ☐ A representative of a community or social service organization (10)
- ☐ Other, please specify: (11) _____

Q11 Is there a fixed term for the Chair?

- ☐ Yes
- ☐ No

Q12 Were you a member of the committee before you became Chair?

- ☐ Yes
- ☐ No

We are interested in knowing a little about the people who are on the committee.

Q13 Please indicate below the number of full members, alternates, and 'others' (e.g. official observers) currently serving on the committee.

Number of full members:

Number of alternates:

Number of others:

Q13A If you indicated there are full members on the committee, please indicate how many of these full members are:

Men:

Women:

Indigenous:

Under 40 years of age:

40-65 years of age:

Over 65 years of age:

From local region:

Q13B If you indicated there are alternate members on the committee, please indicate how many of these alternate members are:

Men:

Women:

Indigenous:

Under 40 years of age:

40-65 years of age:

Over 65 years of age:

From local region:

Q13C If you indicated there are others' on the committee, please specify in what capacity these 'others' participate (for example, as official observers).

Q13D If you indicated there are ‘others’ on the committee, please indicate how many of these are:

- Men: (1)
- Women: (2)
- Indigenous: (3)
- Under 40 years of age: (4)
- 40-65 years of age: (5)
- Over 65 years of age: (6)
- From local region: (7)

Q14 How are members of the committee recruited? Write your answer in the space below.

Q15 Do potential members have to meet certain requirements?

- ☐ Yes
- ☐ No

If ‘Yes’ Is Selected

Q15A If you indicated that potential members have to meet certain requirements, please describe what these requirements are. Write your answer in the space below.

Q16 Approximately, what proportion of committee members attends each meeting?

- ☐ 80-100% of members
- ☐ 50-79% of members
- ☐ 21-49% of members
- ☐ 0-24% of members

The following questions concern member turnover

Q17 Is there a fixed term for members?

- ☐ Yes
- ☐ No

If ‘Yes’ Is Selected

Q17A What is the fixed term for members?

Years:

Q17B Is the term renewable?

- ☐ Yes
- ☐ No

Q18 How many members have left or joined the committee in the past 3 years?

Number who have left:

Number who have joined:

Q19 From the list below, what are the most common reasons members cite for leaving the committee? Please select all that apply.

- ☐ Term is up (1)
- ☐ Too much time required (2)
- ☐ Felt their time was not well spent (3)
- ☐ Too far to drive (4)
- ☐ Other commitments take precedence (5)
- ☐ Conflicts with other members (6)
- ☐ Disagreement with the direction the committee is pursuing (7)
- ☐ Other, please specify: (8) _____

Q20 Has the composition (e.g. background, age, ethnicity) of committee members changed in the past 3 years?

- ☐ Yes
- ☐ No

If 'Yes' Is Selected

Q20A Please describe how the composition of committee members has changed. Type your answer in the space below.

Q21 Do alternates only attend if a regular member is absent?

- ☐ Yes
- ☐ No
- ☐ Not applicable

Q22 How many times does the committee meet over the course of a calendar year?

Number of times per year:

Q23 Are the meetings open to the public to attend?

- ☐ Yes
- ☐ No

If 'Yes' is selected

Q23A You indicated that the meetings are open to the public to attend. Is the meeting time and venue made public in advance?

- ☐ Yes
- ☐ No

Q24 Are the outcomes of each meeting publically available?

- ☐ Yes
- ☐ No

If 'Yes' is selected

Q24A You indicated that the outcomes of each meeting are publically available. Please explain how they are made available. Select all that apply from the list below.

- ☐ On website or online forum (1)
- ☐ Local newspaper (2)
- ☐ Monthly bulletin (3)
- ☐ Word of mouth (4)
- ☐ Central depository (library) (5)
- ☐ Provided at meetings of constituents (6)
- ☐ Other, please specify: (7) _____

Q25 Does the committee have a defined quorum?

- ☐ Yes
- ☐ No

If 'Yes' is selected

Q25A Explain briefly how quorum is defined. Type your answer in the space below.

Q26 How are decisions made by the committee?

- ☐ Consensus
- ☐ Majority Vote
- ☐ Other, please explain (e.g. it's decision-dependent):

If 'Yes' is selected

Q26A If decisions are made by consensus, what does consensus mean in practice for your committee? Type your answer in the space below.

Q27 Based on your experience, does the committee typically evaluate the results of its work?

- ☐ Yes
☐ No

If 'Yes' is selected

Q27A What does evaluation entail? Please select all that apply.

- ☐ We have a general discussion at a committee meeting (1)
☐ We usually have outside evaluators identify the strengths and weaknesses of committee work (2)
☐ We typically establish our own evaluation criteria and apply them during discussions and deliberations, if required (3)
☐ We typically establish our own evaluation criteria and apply them after a specific issue or project so we can learn lessons for work that follows (4)
☐ Other, please specify: (5) _____

Q28 Are the following sources of reimbursement available to committee members?

	Yes (1)	No (2)
Transport costs (1)	<input type="radio"/>	<input type="radio"/>
Per Diem (2)	<input type="radio"/>	<input type="radio"/>
Childcare expenses (3)	<input type="radio"/>	<input type="radio"/>
Loss of income (4)	<input type="radio"/>	<input type="radio"/>
Other, please specify: (5)	<input type="radio"/>	<input type="radio"/>

Q29 Does your committee have a 'terms of reference'?

- ☐ Yes
☐ No

If 'Yes' is selected

Q29A Can we contact you to ask for a copy of the terms of reference?

- ☐ Yes
☐ No

Q30 Can we contact you to ask for information about past members?

☐ Yes

☐ No



The Role of Public Participation in Collaborative Forest Governance in Canada

The following questionnaire concerns your membership of a forest-sector advisory committee in Canada. It forms part of a larger study, funded by the Social Sciences and Humanities Research Council (SSHRC), which investigates the changing nature of forest governance in Canada, and whether current arrangements are well placed to assist the country's forest-based communities during times of environmental, social and economic transition. The research has the potential to benefit participants through identifying and disseminating strategies being used for effective governance. The aggregate results from this study will inform policy and practice in support of Canadian forest-based communities.

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Co-investigator Solange Nadeau, Senior Forest Sociologist, Canadian Forest Service-Natural Resources Canada, Laurentian Forestry Centre, 1055 Du P.E.P.S. Street, Québec, Québec, G1V 4C7, Tel.: (418) 648-5835, email: solange.nadeau@canada.ca

Research Associate James Robson, Natural Resources Institute, University of Manitoba, Winnipeg, Manitoba Tel: (204) 474-8374, james.robson@umanitoba.ca

A National Survey of Forest-Sector Advisory Committees MEMBERS' QUESTIONNAIRE

Consent to participate

Participation in this research is voluntary, and you can stop answering questions at any time. Please note that the data will be collected anonymously. Any personal data (i.e. gender, age, and ethnicity) will not be used or published in a way that risks your identification.

The data collected will be entered into a digital survey platform and database hosted by QualtricsTM, a company located in the USA and subject to US laws. While we will keep the information you give us confidential, it will be stored on servers outside of Canada. The privacy policy for the web survey company can be found at the following link:
<http://www.qualtrics.com/privacy-statement>.

This research project has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office (Email: ethics.office@usask.ca, Tel: (306) 966-2975). Out of town participants may call toll free (888) 966-2975. For more information about the study design and ethics, please contact Principal Investigator, Dr. Maureen Reed, School of Environment and Sustainability (SENS), University of Saskatchewan (Email: maureen.reed@usask.ca, Tel: 1 (306) 966-5630)

Your signature below indicates that you have understood to your satisfaction the information regarding involvement in the research and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or institutions from their legal and professional responsibilities.

Date: _____

Respondent's Name: _____

Respondent's Signature: _____

THANK YOU FOR AGREEING TO PARTICIPATE IN THIS RESEARCH

This questionnaire is expected to take 35-45 minutes to complete. We suggest you keep a copy of this page for your records.

Q1 What is the name of this advisory committee? _____

Q2 How long have you been involved with this particular committee?

Years: _____ (1)

Q3 Since you became a member, how often do you attend board meetings? Please check one of the boxes below:

- ☐ 90-100% of the time (1)
- ☐ 50-89% of the time (2)
- ☐ 20-49% of the time (3)
- ☐ Less than 20% of the time (4)

Q4 Why did you agree to participate on the committee? From the list below, please select up to 3 key reasons for participating on the committee

- ☐ I am concerned about forestry jobs in the area (1)
- ☐ I am concerned about other jobs in the area (2)
- ☐ I am concerned about the impact of the forest industry on the environment (3)
- ☐ I want to contribute to achieving sustainable forest management (4)
- ☐ I am required to attend as part of my job (5)
- ☐ The agency that sponsors the committee asked me to join (6)
- ☐ I want to ensure that science perspectives are included in the process (7)
- ☐ I want to learn more about forest management in the area (8)
- ☐ I want to learn more about other industries in the area (9)
- ☐ I want to ensure that recreational opportunities are not diminished (10)
- ☐ I am concerned about resource-based tourism in the area (11)
- ☐ I have business interests that may be affected by the outcome of the process (12)
- ☐ I want to learn more about land use and forestry planning (13)
- ☐ I want to learn more about the issues that people have in the area (14)
- ☐ I want to contribute to planning since the forest is a public resource (15)
- ☐ I want to contribute to my community (16)
- ☐ I am concerned about the impact of forestry on non-timber forest products / resources (17)
- ☐ I want to protect the intrinsic values of forests (18)
- ☐ Other, *please specify*: (19) _____

Q5 As a member of the committee, whose views were you selected to represent? Please check all applicable boxes:

- ☐ Chamber of Commerce (1)
- ☐ Recreational group (2)
- ☐ Municipal government (3)
- ☐ Provincial government (4)
- ☐ Federal government (5)
- ☐ Forest industry (6)
- ☐ Educational institutions (Universities, Colleges, etc.) (7)
- ☐ Environmental group (8)
- ☐ Indigenous government / organization (9)
- ☐ The public at large (10)
- ☐ My own views (11)
- ☐ Community or Social Service organization, *please specify*: (12) _____
- ☐ Other resource industry, *please specify*: (13) _____
- ☐ Other group, *please specify*: (14) _____

Q5A How often do you update these group(s) or organization(s) about the activities of the committee?

- ☐ Never (1)
- ☐ Occasionally (e.g. once a year) (2)
- ☐ Often (e.g. 2-4 times a year) (3)
- ☐ After every meeting (4)

Q5B How do you reach out to these groups to get their input?

Type your answer in the space below.

Q6 In your opinion, does this committee represent the values of all interested and affected groups (i.e. affected by forestry operations)?

- ☐ Yes (1)
- ☐ No (2)

If you answered 'No' to Q6, please respond to Q6A

Q6A Please indicate the group(s) who, in your opinion, is (are) not represented and why you believe this is so. *Type your answer in the space below.*

Q7 One aspect of our study is to understand how people feel about forests. For each of the following statements, please select the number that best reflects your opinion.

	Totally Disagree (1)	Partly Disagree (2)	Neither Agree nor Disagree (3)	Partly Agree (4)	Totally Agree (5)	No Opinion (6)
It is important for me to know that forests exist in my province. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests should be managed to meet as many human needs as possible. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests should have the right to exist for their own sake, regardless of human concerns and uses. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests give us a sense of peace and wellbeing. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests should exist mainly to serve human needs. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests are sacred places. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to maintain the forests for future generations. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests should be left to grow, develop, and succumb to natural forces without being managed by humans. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Totally Disagree (1)	Partly Disagree (2)	Neither Agree nor Disagree (3)	Partly Agree (4)	Totally Agree (5)	No Opinion (6)
Forests that are not used for the benefit of humans are a waste of our natural resources. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Humans should have more respect and admiration for forests. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests let us feel close to nature. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If forests are not threatened by human actions, we should use them to add to the quality of human life. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests rejuvenate the human spirit. (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests can be improved through management by humans. (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wildlife, plants, and humans should have equal rights to live and develop. (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The primary function of forests should be for products and services that are useful to humans. (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Climate change should influence how forests are managed. (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8 Is the purpose of this committee clear to you?

- ☐ Yes (1)
- ☐ No (2)

If you answered 'Yes' to Q8, please respond to Q8A

Q8A Please provide your understanding of the committee's purpose. *Type your answer in the space below.*

If you answered 'No' to Q8, please respond to Q8B

Q8B Please state why the committee's purpose is unclear. *Type your answer in the space below.*

Q9 In your view, how much influence do the following actors hold in setting the agenda for committee meetings? *Please select the number that best indicates degree of influence.*

	Not at all influential (1)	Slightly influential (2)	Moderately influential (3)	Very influential (4)	Extremely influential (5)	Not applicable (6)
Chairperson (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provincial government (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forest Industry (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facilitator (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Committee members as a whole (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indigenous government / organization (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tourism / recreational groups (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental groups (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Federal government (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local government (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Committee sponsor (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You personally (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academics (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A specific interest group, <i>please specify:</i> _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(14)						
Other, <i>please specify:</i> _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(15)						

Q10A In its discussion and deliberations, **how frequently** does the committee use information about forests and forest management from the following sources?

Please select the number that best reflects your opinion.

	Never (1)	Seldom (2)	Sometimes (3)	Often (4)	Always (5)
Local community (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forest industry (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Government agencies (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
First-hand visits to the forest (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental / conservation organizations (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academics / research scientists (i.e., biologists, ecologists) (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Independent professional foresters (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indigenous government / organization (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other, <i>please specify:</i> <hr/> (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10B In its discussion and deliberations, **how frequently** does the committee use information about forests and forest management via the following forms of communication?

Please select the number that best reflects your opinion.

	Never (1)	Seldom (2)	Sometimes (3)	Often (4)	Always (5)
Newspapers, television, radio (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social media (i.e. Facebook, Twitter) (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other, <i>please specify:</i> <hr/> (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q11 Regarding what you have learned from participating on the committee, do you agree or disagree with the following statements?

	Agree (1)	Disagree (2)
I have learned technical aspects of forest management as a result of participating on the committee. (1)	<input type="radio"/>	<input type="radio"/>
I have come to understand the need to incorporate many different perspectives into forest management processes. (2)	<input type="radio"/>	<input type="radio"/>
The information gained from participating on this committee does not significantly aid me in making decisions on forest management issues. (3)	<input type="radio"/>	<input type="radio"/>
I have learned to work productively with people who think differently than I do. (4)	<input type="radio"/>	<input type="radio"/>
The committee has learned how to incorporate multiple perspectives into its decisions. (5)	<input type="radio"/>	<input type="radio"/>
I am more patient with people who do not share my point of view since serving on this committee. (6)	<input type="radio"/>	<input type="radio"/>
I have gained new insights about traditional knowledge as a result of participating on the committee. (7)	<input type="radio"/>	<input type="radio"/>
I have learned about Provincial regulations/policies guiding forest management as a result of participating on this committee. (8)	<input type="radio"/>	<input type="radio"/>
I have learned about forest certification programs (e.g., Forest Stewardship Council (FSC)) as a result of participating on the committee. (9)	<input type="radio"/>	<input type="radio"/>
I have gained new scientific knowledge as a result of participating on the committee. (10)	<input type="radio"/>	<input type="radio"/>
I have learned about how climate change may affect forest management in the region. (11)	<input type="radio"/>	<input type="radio"/>
I have learned more about ecological stewardship as a result of participating on this committee. (12)	<input type="radio"/>	<input type="radio"/>
Other, <i>please specify</i> : _____ (13)	<input type="radio"/>	<input type="radio"/>

Q12 Please tell us what you have learned about the perspectives of other committee members.
Type your answer in the space below.

Q13 Has participating on this committee enhanced your knowledge of sustainable forest management?

- ☐ Yes (1)
☐ No (2)

If you answered 'Yes' to Q13, please respond to Q13A

Q13A Please describe this new or enhanced knowledge of sustainable forest management. *Type your answer in the space below.*

Q14 List up to 3 of the most important things you have learned as a result of participating on this committee? *Type your answer in the space below.*

Learning 1: _____
Learning 2: _____
Learning 3: _____

Q15 How frequently do you feel pressured to agree with committee decisions, due to the following factors? Please select the number that best indicates how frequently these statements apply to your situation.

	Never (1)	Seldom (2)	Sometimes (3)	Often (4)	Always (5)	Not applicable (6)
Time constraints (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A lack of information (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group pressure (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outside pressure (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The complexity of the issue (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Some other constraint, <i>please specify:</i> _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(6)						

Q16 Regarding the committee's activities, please indicate your level of agreement or disagreement with the following statements. *Select the number that best reflects your opinion.*

	Strongly Disagree (1)	Disagree (2)	Neither Agree Nor Disagree (3)	Agree (4)	Strongly Agree (5)	No Opinion (6)
The process is fair (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Money is well spent in the process (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time is poorly spent in the process (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The process is effective (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deliberations accommodate the full spectrum of public interests (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to influence the decisions that are made by the committee (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have been given adequate opportunity to voice my concerns within the committee (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am disappointed with past outcomes from this process (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe that forest management decision-makers consider all viewpoints (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree (1)	Disagree (2)	Neither Agree Nor Disagree (3)	Agree (4)	Strongly Agree (5)	No Opinion (6)
I trust forest managers to make the right choices about forest management (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust the information presented to me about the impacts of forest management plans (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel comfortable raising concerns, even if they are controversial (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The group is effective in resolving conflict if it arises (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The community at large is more informed about forestry than before the committee was established. (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think forests are managed better because of the existence of the committee (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The general level of trust between forest stakeholders has improved since the committee was established (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Our recommendations have guided forest managers (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Q17 List the one or two areas of forest management decision-making or policy that the committee has been effective in influencing, and the reasons why.
Type your answer in the space below.

Q18 During an average meeting, what percentage of the committee's time is spent:
(Please ensure your answers total 100%)

- _____ Receiving information from the sponsor of the committee (1)
- _____ Receiving information from other sources (2)
- _____ Discussing and debating information (3)
- _____ Making decisions (4)
- _____ Dealing with administrative and financial matters (5)
- _____ Dealing with other activities, please specify: (6)

Q19 Regarding the quality and extent of committee discussions and deliberations, please indicate your level of agreement or disagreement with the following statements. *Please select the number that best reflects your opinion.*

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)	Don't Know (6)
Committee meetings are interactive and personal (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The committee deals with issues in the early stages of decision making about forest management issues (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Controversial issues receive genuine attention and a sufficient response by the committee sponsor(s) (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decision-makers regularly attend and participate in the committee's activities (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When new information arises or a surprise occurs, it is usually incorporated into subsequent decisions (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The issue of climate change features strongly in the committee's agenda (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)	Don't Know (6)
The issue of sustainable forest management features strongly on the committee's agenda (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The addition of new members slows progress while they learn the fundamentals of forest management and planning (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attendance of regular members is sporadic which means we spend a lot of time re-covering old ground (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deliberation and discussion is dominated by particular stakeholder groups (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deliberation and discussion got easier the longer we worked together (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q20 In regards to the statement, discussion and deliberations got easier the longer we worked together, briefly explain how and why committee discussions and deliberations have become easier or more challenging over time. *Please record your answer below.*

Q21 Do you think anything could be done to improve the effectiveness of the committee?

- ☐ Yes (1)
- ☐ No (2)

If you answered 'Yes' to Q21, please respond to Q21A

Q21A Please state below what you believe could be done to improve the effectiveness of the committee.

Q22 In summary, we would like to know how satisfied or dissatisfied you are with the following aspects of the committee's work:

Please select the number that best reflects your opinion.

	Completely Dissatisfied (1)	Somewhat Dissatisfied (2)	Neither Satisfied nor Dissatisfied (3)	Somewhat Satisfied (4)	Completely Satisfied (5)
The representativeness of the committee (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The quality of discussion within the committee (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The quality of information provided for committee discussion (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The diversity of information available to the committee (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The decision- making process in the committee (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The contributions of other committee members (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The efforts of the committee's sponsor (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The level of trust among committee members (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The opportunities to learn new things about forests and forest management (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The overall process in which you are involved (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Finally, we would like to ask for some basic information about you. This information will only be used when combined with others. It will NOT be used to identify anyone who completes the questionnaire.

Q23 What is your professional affiliation/background?

Please select all applicable options.

- ☐ A local industry representative (outside of forestry) (1)
- ☐ A provincial government representative (2)
- ☐ A local government representative (3)
- ☐ An Indigenous leader or representative (4)
- ☐ A business leader (5)
- ☐ An academic (6)
- ☐ A forest company representative (7)
- ☐ A government forestry scientist (8)
- ☐ An independent professional forester (9)
- ☐ A representative of a community or social service organization (10)
- ☐ Other, *please specify*: (11) _____

Q24 Which gender do you most identify with?

- ☐ Male (1)
- ☐ Female (2)
- ☐ Other (3)

Q25 What was your age on your last birthday?

Years: _____ (1)

Q26 How long have you lived in the region?

- ☐ 0-4 years (1)
- ☐ 5-9 years (2)
- ☐ 10+ years (3)

Q27 Do you consider yourself to be an Indigenous person?
(Status Indian, Non-status Indian, Inuit, Métis)

- ☐ Yes (1)
- ☐ No (2)

Q28 Do you belong to any of the following organizations?
Please select all that apply.

- ☐ A natural history or bird-watching club (1)
- ☐ A hunting or fishing organization (2)
- ☐ An environmental organization (3)
- ☐ A community or social service organization (4)

Q29 Does anyone in your household engage in fishing, forestry, mining, work in the oil and gas industries, or work for a natural resource agency with either the provincial or federal government, for their economic livelihood?

- ☐ Yes (1)
- ☐ No (2)

Q30 What is the highest level of education that you have completed?

- ☐ Grade 9 or Less (1)
- ☐ Some High School (2)
- ☐ High School Graduate (3)
- ☐ Technical School or Community College (4)
- ☐ Some University (5)
- ☐ University Degree (Bachelors) (6)
- ☐ Some Graduate Study (7)
- ☐ Graduate University Degree (8)

**PLEASE RETURN THE COMPLETED QUESTIONNAIRE TO DR. MAUREEN REED,
SCHOOL OF ENVIRONMENT & SUSTAINABILITY, UNIVERSITY OF
SASKATCHEWAN, USING THE PRE-PAID ADDRESSED ENVELOPE PROVIDED**

APPENDIX C
Research Consent Protocols and Ethics Certificate

Phone Interview Consent

Hello, may I please speak to (***FULL NAME OF INTERVIEWEE***)

1. ***Yes, speaking*** ***CONTINUE***
2. Yes, I'll get him/her ***REPEAT INTRODUCTION AND CONTINUE***
3. Not available ***ARRANGE CALLBACK***

My name is Bimala Khanal, and I am currently pursuing a Master's of Environment and Sustainability at the University of Saskatchewan. I am working under the supervision of Dr. Maureen Reed, on a research project, which aims to examine the nature of public advisory committees across Canada. My own Master's research evaluates how men and women participate in forestry advisory committees across Canada.

I would like to thank you for your participation on a national survey of Forest-Sector Advisory Committees, conducted few months ago. I have designed a follow-up interview to gain a more in-depth understanding of committee members' experiences, especially about how women and men describe representation, values, experiences and satisfaction in connection to their membership of and role on these committees.

I would like to interview all possibly people on this committee and so I would like to invite you to participate in this follow-up interview. Participation is voluntary, and you can stop the survey at any time. The information collected will be kept strictly confidential and none of the answers that you provide will be attributed to you personally. If you have any questions or concerns regarding the research project, you may contact me at 639-317-6839 or my supervisor, Dr. Maureen Reed at 306-966-5630. If you have questions about being a participant in research you can call the Chair of the Research Ethics Board at the University of Saskatchewan 306-966-2975 or toll free 888-966-2975.

I would like to use an electronic recording device during the interview. Please be aware that you may ask that the recording be shut off at any time or ask to erase any portion of the interview you do not feel comfortable with.

Do you agree to the use of an electronic recording device during the interview?

___ Yes
___ No

Are you willing to participate in the survey?

___ Yes
___ No

1. Yes ***CONTINUE***
2. No ***THANK AND END INTERVIEW***
3. Later/Not right now ***ARRANGE CALLBACK***



UNIVERSITY OF
SASKATCHEWAN

Behavioural Research Ethics Board (Beh-REB)

**Certificate of Approval
Study Amendment**

PRINCIPAL INVESTIGATOR
Maureen G. Reed

DEPARTMENT
School of Environment and Sustainability

Beh #
15-340

INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT
Canada

STUDENT RESEARCHER(S)
Maaya Hitomi, Bimala Khanal, Alemu Nenko

FUNDER(S)
SOCIAL SCIENCES AND HUMANITIES RESEARCH COUNCIL OF CANADA (SSHRC)

TITLE
The Role of Stakeholder and Public Participation in Collaborative Forest Governance in Canada: Contributing to Theory and Practice through Comparative Study

APPROVAL OF
Personnel added.

APPROVED ON
10-Mar-2017

CURRENT EXPIRY DATE
07-Dec-2017

Full Board Meeting ☐

Date of Full Board Meeting:

Delegated Review ☒

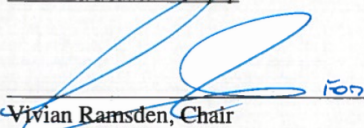
CERTIFICATION

The University of Saskatchewan Behavioural Research Ethics Board (Beh-REB) is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2 2014). The University of Saskatchewan Behavioural Research Ethics Board has reviewed the above-named research project. The proposal was found to be acceptable on ethical grounds. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to this research project, and for ensuring that the authorized research is carried out according to the conditions outlined in the original protocol submitted for ethics review. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol or consent process or documents.

Any significant changes to your proposed method, or your consent and recruitment procedures should be reported to the Chair for Research Ethics Board consideration in advance of its implementation.

ONGOING REVIEW REQUIREMENTS

In order to receive annual renewal, a status report must be submitted to the REB Chair for Board consideration within one month prior to the current expiry date each year the study remains open, and upon study completion. Please refer to the following website for further instructions: <http://research.usask.ca/for-researchers/ethics/index.php>


Vivian Ramsden, Chair
University of Saskatchewan
Behavioural Research Ethics Board

Please send all correspondence to:

Research Ethics Office
University of Saskatchewan
Box 5000 RPO University, 1602-110 Gymnasium Place
Saskatoon SK S7N 4J8
Telephone: (306) 966-2975 Fax: (306) 966-2069

APPENDIX D

Interview Guide

Section A: Participation

1. What is your role in the committee?
2. How long have you served on the committee?
3. What were you hoping would be accomplished by participating on the committee? Were your expectations met? Why, why not?
4. Have you observed any significant changes in how the committee operates since you started serving on the committee?

Section B: Representation

5. Do you think men and women are well represented on the committee?
6. I see from the membership list that there is a good gender balance in your committee.
 - a. How do you think gender balance was achieved?

Or

I see from the membership list that there is a serious gender imbalance in your committee.

 - a. Why do you think that women are not better represented?
 - b. What effect do you think this has, if any, on the types of decisions or recommendations that are made by the committee?
 - c. Do you think that there is anything that the committee could do to improve representation of women?
7. Do you think there were any obstacles that have prevented women from participating in the committee in the past? What are these obstacles? And how do you think these obstacles were overcome?
8. What do you think are the consequences of increasing women's representation in the committee?
9. Do you think more (or less) women on the committee would lead to different outcomes?
10. Do you know of women that have left the committee? Could you please tell me why they left or anything about that?
11. Do you know of people from any other under-represented groups who left? Why did they leave?

Section C: Representation of Values

12. In your opinion what roles do men and women have in the forest industry/forest management?
 - a) In discussions about forest management?
 - b) In using the forest? (e.g. for recreation, wildlife and fish)
13. What values about forest do you think women bring to the Advisory Committee?
14. What values about forest do you think men bring to the Advisory Committee?

Section D: Process and Deliberation

15. Do some people on the committee participate more than others? Why or why not?
16. Do you think there are some barriers limiting (some) members from participating in discussions at the meetings? If so, please tell/share. (Probe to determine if some groups of

people face barriers specific to that group...for example, do Indigenous people face certain barriers that are different from unemployed people).

- a. Are they different from the barriers that (opposite gender, indigenous members, and non-indigenous people) face?
 - b. What strategies, if any, do you think you could use to overcome these barriers?
 - c. Are there barriers limiting other groups too?
17. Do you think having more/less women on committee would have an effect on your participation
- a) in discussions
 - b) and in the decisions, you make?
18. Do you think having more/less men on committee would have an effect on your participation
- a) in discussions
 - b) and in the decisions, you make?
19. Can you give me an example where a woman was particularly influential on an issue the committee addressed? Why was she influential in this case? Are there strategies you feel might encourage women to have greater in committee discussions?
20. Are there any other groups that you think are underrepresented on this committee?
- a. If no, go to next question.
 - b. If yes, are there procedures built onto your meeting processes to ensure that underrepresented groups feel comfortable sharing/expressing their views?

Section E: Effectiveness

21. Do you think this committee is effective in contributing to Sustainable Forest Management?
- a) Why?
 - b) Why not?
22. How could its effectiveness be improved?

Closing Question

23. Do you have any final comments on this interview or about the advisory committee that you participate on?

Thank you!